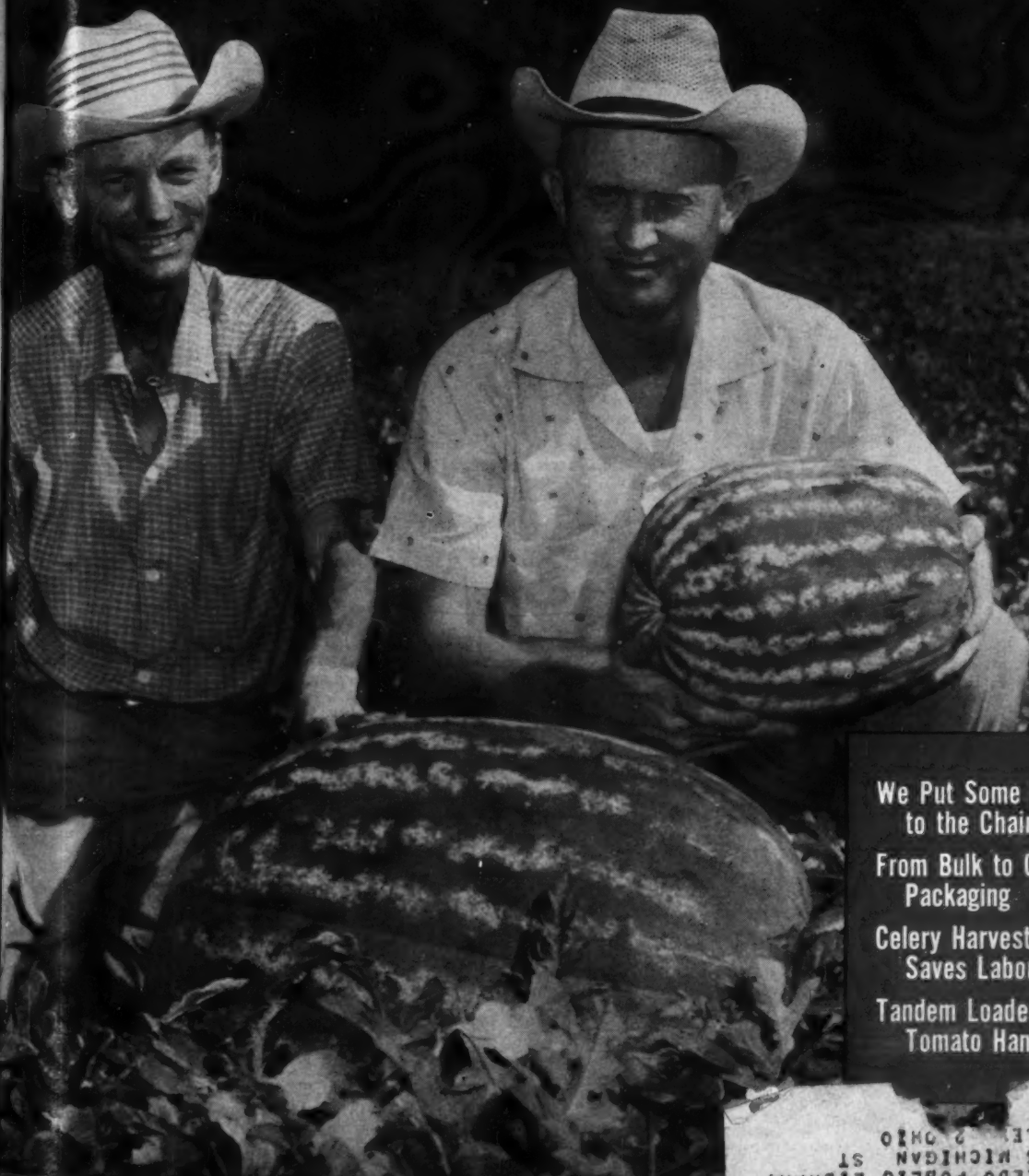


American Vegetable Grower

and MARKET GROWERS JOURNAL

August • 1959

STACK



We Put Some Questions
to the Chains

From Bulk to Consumer
Packaging

Celery Harvester
Saves Labor

Tandem Loader Speeds
Tomato Handling

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From Texas to Ike—a 126-Pou



Keystone LIFEGARD

Packaging COSTS NO MORE!

The exclusive LIFEGARD hermetically sealed tin can is now standard pack for all one pound and quarter pound sizes of Keystone vegetable seeds (other than beans, peas and corn.)

LIFEGARD canned seed is your best assurance of high germination and maximum vigor because

- Only seed protected from atmospheric moisture can keep its high initial vitality for long periods
- The only positive protection is a properly sealed tin can
- Corneli's LIFEGARD is the only seed canning process backed by over 20 years of research and large scale commercial experience

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for maximum performance at no extra cost**

CORNELI SEED COMPANY
BREEDERS AND GROWERS • ST. LOUIS 2, MO.

**CORNELI
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SEEDS**
SEEDS
SINCE
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1. Safe!
2. Makes
3. Saves
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Tailor-Made for Vegetables!

New Agricultural Grade

Grace Crystal Urea

Fertilizer Compound

low biuret

(Less than 0.2%)

and completely water soluble!

1. Safe! Especially Formulated for Foliar Application.
2. Makes Possible Maximum Yields and Top Quality.
3. Saves Time, Labor, Equipment.

The low biuret content of new Grace Crystal Urea gives you concentrated nitrogen (46%) that's *completely safe* for foliar application.

The nitrogen in Grace Crystal Urea is *immediately* available to plants, and the nitrogen goes to work almost at once. Supplying this *extra* nitrogen in this easy way gives you maximum yields and top quality.

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FOR SOIL APPLICATION use free-flowing Grace Urea Prills. Guaranteed 45% Nitrogen. Ideal for Top-Dressing or Side-Dressing of fruits and vegetables, as well as field crops.

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The best tomato seed comes from California,

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Manager, Quality Control



"Here in California where humidity is low and we grow tomato seed with irrigation, seed-borne diseases are rare.

Naturally this means healthier, hardier plants and pure, clean seeds to carry on the same fine quality! The Clarence Brown selection such as Homestead is only one of over 40 specialized strains that we grow. And because we at Clarence Brown specialize in breeding tomato seed, it's just good sense that ours is the best and most productive tomato seed you can plant! Ask your supplier for Clarence Brown tomato seed with bright blue SRS label."

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WRITE FOR NAME OF NEAREST SUPPLIER



American Vegetable Grower

Reg. U.S. Pat. Off.
Commercial Vegetable Grower
Market Growers Journal

VOL. 7

No. 8

AUGUST, 1959



Cover photograph shows Landon H. Bradshaw, author of article on Giant Watermelons (page 13) with hand on 126-pound melon, and Daryl White, field representative of Olin Mathieson Chemical Co., holding a 30-pounder. The 126-pounder was flown to President Eisenhower.

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AMERICAN VEGETABLE GROWER

AUGUST, 1959

Switch IMPLEMENTS in Seconds



with **NEW**
AUTOMATIC

INSTA-HITCH

For All Three-Point and Tongued Equipment

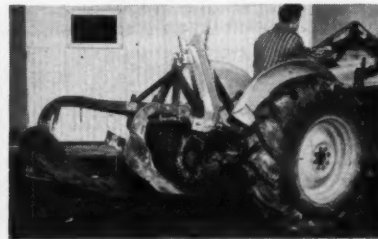
Here's the first automatic tractor hitch that hooks up any three-point or tongued implement in seconds . . . and without leaving the tractor seat. Equipment can be changed just as fast.

Pays For Itself

Insta-Hitch will pay for itself quickly in labor savings and increased efficiency. It's safer, too . . . no smashed fingers or toes grappling with heavy bars, bolts and jacks.

**Cuts Costly
Time and Work
Hooking Up**

**Plow
Disc
Scraper
Rake
Sprayer
Cultivator**



The hitch features a triangular unit which bolts onto the three hitching points of the tractor. Matching couplings attach to the implements.

To hook up, merely back up until protruding hook on tractor coupling engages matching unit on implement.

Raise tractor hydraulic arms, push locking lever . . . and drive away.



R. M. WADE & CO.
Portland, Oregon

WESTERN MACHINERY CO.
Salt Lake City

Here's the kind of weed
control you're looking for!
Vegadex® can give you
weed-free fields like this,
save hand labor, too.



MONSANTO'S "RED" EMM shows how one spraying of Vegadex cleaned weeds out of this spinach field without hand-weeding.

This new chemical weeder for vegetables works for you in a new way. You spray it on your soil once, at planting time. Vegadex kills annual grasses (even tough weeds like purslane and henbit) before they sprout—but vegetables come up unharmed. Growers all over the country report saving \$20 to \$100 an acre on weeding costs. Read what these growers say:

"Vegadex sprayed on our lettuce not only saved weeding costs, but reduced our fertilizer and water costs. Vegadex cut down disease and insect damage, too."

Mr. Emery E. Evans,
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"For the past two years I've sprayed Vegadex on my celery and got real good weed control. Vegadex saved me plenty

on this crop and I plan to use it from now on in."

Mr. John Smit,
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"Vegadex gives us excellent weed and grass control on our leaf crops. It's a real money-saver. We feel Vegadex will be part of our operation for years to come."

Mr. Ken Jorgensen,
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Zellwood, Florida

Vegadex controls . . . purslane, careless weed, henbit (blueweed), pigweed, crab grass, barnyard grass (water grass), bull grass (goose grass), chickweed, foxtails, annual bluegrass.

Vegadex is safe for . . . collards, mustard greens, turnip greens, broccoli, cabbage, snap beans, soybeans, celery, sweet corn, kale, spinach, hanover salad, Brussels sprouts, lima beans, lettuce, garden beets, cauliflower, and field corn.

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In Your Area,
Mail Coupon Today!



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Organic Chemicals Division
Agricultural Chemicals Department
St. Louis 66, Missouri

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Address.....

City..... State.....

AMERICAN VEGETABLE GROWER

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Phoenix—Arizona

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Affiliate: Fort Smith
North Little Rock—

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Sunland Industries
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Davison Chemi

AUGUST, 195

PAUL WORK

1886-1959

AN illustrious career in vegetable teaching, research, and writing came to an end on July 8 with the death of Paul Work. Well-known to readers of AMERICAN VEGETABLE GROWER, Dr. Work was consulting editor and a frequent contributor. A special memorial service will be held for Dr. Work at Ithaca, N. Y., in September.

Dr. Work's list of accomplishments and honors is long. Filled with energy, he was a frequent visitor at vegetable meetings. He traveled widely and only recently had returned from a trip to the International Horticultural Congress in the British Isles and the Continent.

From 1910 to his retirement in 1951 he was a member of the vegetable crops department at Cornell University, and hundreds of his students hold key positions today in the vegetable industry from coast to coast.

Born in Kermoor, Pa., Dr. Work became interested in vegetable growing as a result of working on the farm of R. L. Watts who was later to become Dean of the College of Agri-



Paul Work

culture, Pennsylvania State College. He received his degree in horticulture from Penn State in 1910, his MS from Cornell in 1913, and his PhD from Minnesota in 1921.

In addition to his experience at Cornell, he taught a course in truck crops at the University of California in 1939 and engaged in research at Puerto Rico Experiment Station in 1947-48. In 1953 he traveled to the Philippines to work with the Cornell Mission at the Philippines College of

Agriculture.

He was close to the growers of New York State, having helped to organize the New York State Vegetable Growers Association in 1911. He served as its secretary for the first six years, and was elected honorary life member of the Board of Directors in 1951.

Paul Work was the kind of man you couldn't help like. Perhaps it was because he didn't stand on pomp or ceremony. He was down to earth and easy to approach because he liked people and tried to be helpful. He had an eternal curiosity and loved to figure out why things happened or what the future would be.

He was not content to let things remain routine or static. When he took over the vegetable variety trials at Cornell he enlarged and improved them to the point where they became the leading vegetable variety trials in the world. At that time, through the influence of his personality and his work the feeling of mistrust that existed between seedsmen gradually disappeared.

Men like Paul Work helped build the vegetable industry into what it is today; his loss will be keenly felt.



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Longmont—Farm Chemical Company

CONNECTICUT

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Davison Chemical Division

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ILLINOIS

Bloomington—Funk Brothers Seed Company
Fairmount—Trisler Seed Farms
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Louisville—Louisville Chemical Company

LOUISIANA

Houma—Bel Chemical & Supply Co., Inc.

MARYLAND

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Frederick—Miller Chemical & Fertilizer Corp.
Salisbury—Miller Chemical & Fertilizer Corp.
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MASSACHUSETTS

Framingham—Axton-Cross Corporation
West Concord—Eastern States Farmers
Exchange
West Springfield—Eastern States Farmers
Exchange

MICHIGAN

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Grand Rapids—Haviland Agricultural
Chemical Company

MINNESOTA

Minneapolis—George A. Clark & Son, Inc.
Twin City Seed Company
St. Paul—Lyon Chemicals, Inc.
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MISSISSIPPI

Greenville—Walcott & Steele, Inc.

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NEW JERSEY

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Fertilizer Corp.
West Caldwell—Rockland Chemical
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Barker—Barker Chemical Corporation

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NORTH DAKOTA

Forge—Interstate Seed & Grain
Company

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assurance of Monsanto Quality



Johnny Brown's crops were a sick-looking sight,
They were droopy, and weak, and grew but a mite.
While wise Carl Johnson's weren't sickly at all,
And some of them stretched near to seven feet tall!



One day, as young Brown was bemoanin' his lot,
And telling his friend how his crops went to pot,
Wise Johnson observed, "I'd say that they totter,
Because they're not getting enough growing water!"



"Get USS National Polyethylene Pipe!
Irrigation with ease, keeps crops fresh and ripe.
A snap to install; it's easy to do.
It goes around corners, and 'neatly' fences too!"



Young Johnny Brown took friend Johnson's advice,
And now his crops bring the top market price.
Production has climbed, and credit is laid
To National Pipe—NSF Grade!

Remember, USS National Polyethylene Pipe unrolls like a hose, resists acids, alkalis and rot, performs efficiently in a temperature range of -90°F. to $+120^{\circ}\text{F.}$, and won't crack or break in sub-zero weather.

National Polyethylene Pipe comes in lengths up to 400', in diameters from $\frac{1}{2}$ " to 6". And, it's made of 100% virgin polyethylene plastic to which 3% carbon black filler has been added to prevent deterioration from ultraviolet rays. Insert fittings in nylon and styrene copolymers (NSF) are now available from National Tube. For complete information, write to National Tube Division, United States Steel, 525 William Penn Place, Pittsburgh 30, Pa.

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CALENDAR OF COMING MEETINGS AND EXHIBITS

Aug. 6—Empire State Potato Club Summer Field Day, Allen Acres, Waterville, N. Y.—Frederick P. Howe, Program Chairman, Boscoville, N.Y.

Aug. 9-12—American Institute of Cooperation 31st annual summer session, University of Illinois, Urbana.—G. J. Jordan, Dept. of Agricultural Economics, University of Illinois, Urbana.

Aug. 11-12—Ohio Pesticide Institute, Ohio Agriculture Experiment Station, Wooster.

Aug. 12-16—Potato Association of America 43rd annual meeting, University of New Brunswick, Fredericton, N.B., Canada. In charge of reservations: Mrs. M. E. MacGillivray, P.O. Box 230, Fredericton, N.B.

Aug. 17-21—Annual Farm and Home Week, Clemson Agricultural College, Clemson, S.C.—Thos. W. Morgan, Gen. Chairman, Clemson Agricultural College, Clemson.

Aug. 18—Eastern Ohio Potato Field Day, Ward J. Ramseyer farm, Smithville.

Aug. 22—Maine Vegetable Growers field day, Highmoor Farm, Monmouth, Me.

Aug. 25-Sept. 26—A European Holiday for Horticulturists, including visits to greenhouse areas in England and Holland during seven-country tour.—Under leadership of Harold S. Ward (retired Cuyahoga County, Ohio, agricultural agent), 7393 Netherdale Dr., Cleveland 30, Ohio.

Aug. 27—Sweet Corn Day, Northwest Washington Experiment Station, Mount Vernon, Wash.

Aug. 27-30—American Society for Horticultural Sciences tour through southeastern Pennsylvania including visits to vegetable farms, greenhouses, mushroom houses.

Aug. 30-Sept. 3—American Institute of Biological Sciences and member biological societies, including American Society for Horticultural Science annual meetings, Pennsylvania State University, University Park.—R. E. Larson, Chairman, Penn. State Univ., University Park.

Aug. 31-Sept. 1—United Fresh Fruit and Vegetable Association annual Merchandising and Management conference, Drake Hotel, Chicago, Ill.—Association headquarters, 777 14th Street, N.W., Washington 5, D.C.

Sept. 4-12—New York State Fair, Syracuse. Sept. 13-16—Produce Packaging Association 9th annual convention and exposition, Sheraton Hotel, Philadelphia, Pa.—Robert L. Carey, Exec. Sec'y, South College Ave., Newark, Del.

Sept. 14-16—United Fresh Fruit and Vegetable Association annual merchandising and marketing conference, Drake Hotel, Chicago, Ill.—Association headquarters, 777 14th St. N.W., Washington 5, D. C.

Sept. 14-16—Texas Citrus and Vegetable Growers and Shippers meeting, Hotel Statler Hilton, Dallas.—Austin E. Anson, Exec. Vice-Pres., 306 East Jackson, Harlingen.

Sept. 23-25—Florida Fruit and Vegetable Association meeting, Hotel Fontainebleau, Miami Beach.—Joffre C. David, Sec'y-Treas., Orlando.

Oct. 4-7—National Association of Marketing Officials annual convention, Asheville, N.C., and Atlanta, Ga.—Wm. A. Wunsch, Pres., State College, N.M.

Oct. 27-29—Florida State Horticultural Society 72nd annual meeting, Everglades Hotel, Miami.—S. John Lynch, Pres., 29800 Newton Rd., Homestead, Fla.

Oct. 27-29—Western Growers Association meeting, Ambassador Hotel, Los Angeles, Calif.—Frank E. Castiglione, Sec'y, 3091 Wilshire Blvd., Los Angeles 5.

Nov. 12—Washington State Council of Farmer Co-operatives annual meeting, Hotel Chinook, Yakima, Wash.

Nov. 17-19—National Potato Council meeting, La Salle Hotel, Chicago, Ill.—A. E. Mercker, Executive Director, 542 Munsey Bldg., Washington, D.C.

Nov. 19—New Jersey Marketing Institute annual meeting, Princeton.—Tunis Denise, Freehold, Pres., New Jersey Agricultural Society.

Dec. 3-4—3rd Annual Ohio Potato Growers' Short Course, Ohio Agricultural Experiment Station, Wooster.

Dec. 6-10—National Junior Vegetable Growers Association convention, Roosevelt Hotel, Washington, D. C.—Grant Snyder, National Chairman, French Hall, University of Massachusetts, Amherst.

Dec. 7-10—Vegetable Growers Association of America annual convention, Dennis and Shelburne Hotels, Atlantic City, N.J.—R. M. Frederick, Exec. Sec'y, 528 Mills Bldg., 17th St. and Pennsylvania Ave., N.W., Washington 6, D. C.

Jan. 25-30—New Jersey Farmers Week, Trenton.

Feb. 1-3—Ohio Vegetable and Potato Growers Association annual meeting, Neil House, Columbus.—E. C. Wittmeyer, Sec'y, 1827 Neil Ave., Columbus.

Feb. 3-5—Ohio State Horticultural Society annual meeting, Neil House, Columbus.—C. W. Ellenwood, Sec'y, Wooster.

AMERICAN VEGETABLE GROWER

COMING EXHIBITS

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GROWER

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Because it bears without let-up, for continuous harvest, this improved strain produces heavier yields of No. 1 fruit than regular Yolo Wonder. Upright plants provide denser foliage cover for pendently borne fruits, and are resistant to Tobacco Mosaic. Fruit is predominantly 4-lobed, thick-walled and blocky. Stock up now for the coming season.



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COMPAK 2 CELERY PRODUCES VERY SMOOTH, BRIGHT GREEN HEADS

This special strain selected by Ferry-Morse breeders is similar to F-M Utah 52-70 but has better holding ability and slightly deeper color. Plants are 19" to 22" tall with good girth. Compact, cylindrical heads produce deeply cupped, very smooth stems 8½" to 10½" long to joint. Shows resistance to leaf yellowing and to brown check.





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LETTUCE FOR HEALTHIER,
HIGHER-YIELDING CROPS**

Ferry-Morse lettuce seed tests 99.9% Mosaic free. It can give you up to 25% higher yields than ordinary seed, because it practically eliminates primary (seed-borne) infection. Order now: all popular Great Lakes strains, plus Climax, Cornell 456, Dark Green Boston, Empire, Lakeland, Merit, Vanguard, Prize Head, Ruby, and Dark Green Cos.

Tailor-made for you by FERRY MORSE



FERRY-MORSE SEED CO.—Detroit, Mich. • Mountain View and Los Angeles, Calif. • Memphis, Tenn. • Harlingen, Texas • Tampa, Fla.

**F-M GREEN MOUNTAIN
BROCCOLI BEST FOR
BUNCHING AND FREEZING**

Developed by Ferry-Morse to meet the needs of market growers and freezers. This is a uniform maturing, extra-early sprouting broccoli with large, compact, dark green center heads. Buds are tight and attractive. Long flower stems separate easily for freezing. Check your needs and order now.



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JOHN CAREW,
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Editor for AMER

AUGUST, 1959



We Put Some Questions **TO THE CHAINS**

- **What is the best way to sell to chains?**
- **Why does local produce lose out to shipped-in?**
- **Why are vegetables often used as loss leaders?**
- **What governs produce buying decisions?**

By **JOHN CAREW**

CHAIN STORE produce buyers are men of influence—with an authority that extends from consumer to farmer. They guide consumer buying, dictate packaging and handling practices, and strongly affect the economic lives of thousands of fruit and vegetable producers. If the dynamic growth of chains is a valid measure of success, they are doing their job well.

Produce buyers and growers have their differences of opinion. Buyers say that many growers have failed to adapt their production and marketing practices to the large-volume, uniform-pack needs of modern supermarkets. Growers counter that buyers are generally unwilling to pay for the extra services and high quality they demand, place an exorbitant mark-up on the produce they sell, and lack appreciation of the numerous problems in crop production.

Some buyers attempt to minimize

their influence by claiming that, "Mrs. Consumer is the real boss; she dictates all produce buying."

Automobile designers say the same thing. But few car buyers ever asked for tail fins or swivel seats; and it is doubtful if a housewife ever demanded new crates or vacuum-cooled lettuce. Although consumers exercise a strong power of acceptance or rejection, they, like car buyers, can be educated to a wide range of policies originating with chain store management.

Many growers, on the other hand, condemn chains without attempting to understand their methods—methods frequently dictated by competition and consumer preference.

A need for better understanding between growers and chain store buyers is apparent. Neither can afford antagonism.

Toward this end, we interviewed the head produce buyers of five major chains. This was the question: "*How can fruit and vegetable growers improve their business relations with your firm; in other words, increase their sales and improve the price received?*"

Here is what they said:

About Centralized Produce Buying: Each chain store buyer will be purchasing larger quantities for a greater number of stores. One man buying for 25 to 50 stores is not uncommon. Buyers lack the time, much less the desire, to dicker over small lots of fruit and vegetables.

Fewer individual store managers will have buying authority; their produce is handled with the selling price attached.

About Buyer-Grower Relations:

We asked to what extent buyers are influenced by personal favors.

"Buyers are human," said one produce man. "We're really no different than growers. But 'buying' your produce into a chain with gifts and favors is far less effective and common than most of our critics realize. What *does* influence us is personal contact, by telephone and visits, with aggressive salesmen who keep us informed on the products and services they have to offer.

"We prefer buying as directly from the source of supply as possible—from the man who can best give us the service we want, whether he be grower, salesman for a group of growers, or a broker."

Many chains are strengthening their ties with specific growers in each buying area. But all expressed a reluctance to tie in too closely with a single source of any one crop; they prefer to spread the risk among several.

"We are definitely not trying to hurt the little grower. If he can give us the quality we want, package according to our needs and offer dependable service, we'll deal with him."

About Grower Organizations:

"We want consistency of supply. If grower co-operatives or corporations can give us what we need, we'll deal with them.

"But the answer is not putting one label on a number of different grower packs. We want uniform merchandise.

"I bought a load of potatoes last fall from a co-op. It was made up by three different growers all using the

(Continued on page 27)

JOHN CAREW, Professor of Horticulture at Michigan State University, East Lansing, is Consulting Editor for AMERICAN VEGETABLE GROWER.



Here's the Latest on PREPACKAGING

Produce generally handled in bulk is now finding its way to the prepackaging line

Growers and shippers attending the Southwestern Michigan Packaging Show learned about some of the prepackaging experiments now in progress throughout the country. The report was made by Donald Stokes, packaging expert in USDA's Agricultural Marketing Service. Excerpts from his talk are given here.—Ed.

By DONALD R. STOKES

RECENT experiments in prepackaging commodities generally handled in bulk have shown considerable promise. Let's look at a few of them:

Asparagus: Prepackaging asparagus offers savings in transportation and distribution because the inedible portion of the stalk is trimmed off at point of shipment. Recent tests with window cartons and poly bags in New Jersey, Washington, and California indicated about 35% of the average asparagus stalk is inedible. Prepackaging asparagus should prevent dehydration and maintain better quality.

Broccoli: Fresh broccoli consumption seems to be shifting away from the fresh form to frozen. The cost of prepackaging made the price of ready-to-cook broccoli enough higher than bunched broccoli that consumers seem to prefer either lower priced bunched broccoli or ready-to-cook frozen broccoli.

The possibilities of packaging bunched broccoli in moistureproof sheet film should be studied.

Green Beans: In co-operation with a large corporate grocery chain, we recently experimented with prepackaging of green beans in Belle Glade, Fla., and shipped them to New York City.

Both the hydrocooled and vacuum-cooled green beans in polyethylene and polymer-coated cellophane arrived in New York City four days after shipment by rail, in excellent condition. They were in salable condition for four to seven days after arrival.

The vacuum-cooled green beans, however, remained in better condition and did not spot or discolor as soon as the hydrocooled beans. The beans packaged in polymer-coated cellophane appeared to be more attractive and more salable because of less moisture condensation in packages.

Cauliflower: Great progress has been made in prepackaging whole cauliflower heads with the jacket leaves removed, the heads being overwrapped in cellophane. California is the leading shipper of cauliflower and over 90% of central California fresh cauliflower is now prepackaged.

Savings in transportation space and refrigeration requirements of prepackaged cauliflower are considerable over bulk cauliflower with the jacket leaves attached. One chain store operator recently advised that he thought transportation savings amounted to as much as 5 cents a head. More research is needed to develop improved master containers.

Celery: Commercial experiments in prepackaging celery at shipping point were underway during the winter of 1958-59. Vacuum-cooling celery appears very promising. Considerable savings can be effected by prepackaging celery at shipping point instead of retrimming and repackaging it at the terminal market where, as a rule, labor costs are higher.

Sweet Corn: Probably the surest way to prepackage sweet corn and assure adequate refrigeration is as follows: Partially strip it—wet it—package it in poly bags—vacuum-cool it—pack it in wirebound crates with "package ice" and ship it under top ice. Prepackaging of sweet corn looks very promising if adequate refrigeration practices can be developed.

Chinese cabbage was recently prepackaged in poly bags and in polymer-coated cellophane on an experimental basis in Florida, for shipment to northern terminal markets. Quality was maintained for several days after arrival. There is little doubt that waste losses can be reduced and better quality maintained by reducing dehydration if the product is packaged in semi-moisture-proof film.

Escarole and chicory prepackaging tests in Florida showed that dehydration or wilting losses can be reduced by prepackaging these items in semi-moisture-proof film. Both of these items have excellent shelf life

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AMERICAN VEGETABLE GROWER

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AUGUST, 1959

Texan Tells How He Grows GIANT WATERMELONS

**He has standing orders for his 125-pounders—
but his 30-pounders sell readily too!**

By LONDON H. BRADSHAW

THOSE giant watermelons "like grandpa used to grow" have a definite place on today's market, and can still be grown.

Some "experts" have spawned the idea that a small family needs a small 12- to 15-pound watermelon, a medium sized family needs a medium 20- to 25-pound watermelon, without taking into consideration that a small family can, and often does, have company. This past season, my largest watermelon weighed 126 pounds and went to a family of two—the Dwight D. Eisenhower family.

For succulence, watermelons must be grown rapidly. Most watermelons ripen within 30 days after coming on the vine. This means that a 90-pound



Jasper County Agent Grady King (right) and Bradshaw ponder how to carry 210 lbs. of Sugar Loafs.



They solve their problem! John Mays (front) and William Roberts load the melons on a stretcher. Careful, now . . .

week before cutting them. Once a week I replace with vine-fresh melons those that have not been sold. These I pick up while they are still good, and donate them to hospitals and boys' clubs for immediate use.

If your product is good, word gets around and you have little trouble selling. I live 4 miles from a paved road, and Brookeland, Texas, the nearest town, is 5 miles away. Yet, most of my watermelons are sold at the field—often to people who have driven more than 100 miles. I have never hauled a watermelon more than 12 miles, but my product has gone to practically every state and to the District of Columbia.

Gummed labels pasted to each watermelon, giving your name, address, telephone number, and guarantee, are good advertising and give your customer confidence in your product.

A good job of selling can account for half the profits in watermelons, but a poor job of growing them often accounts for all the loss. There is no secret formula for growing good melons, but the following steps can take the "hard luck" out of your project:

1) Use certified seed. The cost of good seed is small compared to the

(Continued on page 30)

specimen must gain 3 pounds a day. To make this kind of growth, plants must be kept free of insects and diseases, and all required nutrients must be available.

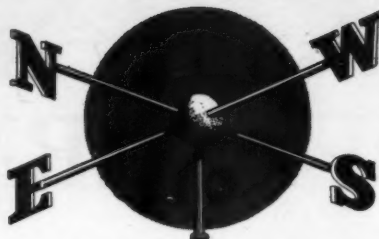
For four years I have grown 50- to 125-pound watermelons, which I have sold locally for premium prices. Although grown primarily for family reunions, church socials, and homecomings, my melons often sell to tourists as "something big from Texas".

I have standing orders from local supermarkets and roadside stands for all watermelons weighing 100 plus.

These dealers pay 10 cents a pound for the first 100 pounds, plus \$1 a pound for every pound over 100. The watermelons are used for advertising and are usually given away as prizes. Kolb's Gem, Sugar Loaf, White Seeded Watson, and Mountain Sweet are among the varieties capable of growing to more than 100 pounds.

When you deliver watermelons to a local merchant, remember, you can sell to him again only after he has sold out. It is to your advantage to keep the melons fresh. People often buy watermelons and keep them a

STATE



NEWS

- AFBF Formulating Plans to Aid Bargaining Groups
- California Working Toward Surplus Processing Tomato Control

College Changes Name

IOWA—On July 4, Iowa State College of Agriculture and Mechanic Arts became known as Iowa State University of Science and Technology. State legislators voted for the name change because the term "college" generally refers to a school of specialization, while "university" means a wider, more versatile school, which best defines Iowa State.

Bargaining Groups Stabilize Prices

NEW YORK—Bargaining groups can materially improve the price situation of agriculture, stated Harold J. Hartley, assistant director of the Commodity Division of American Farm Bureau Federation, at a June conference of area county Farm Bureau presidents and the directors of New York Canning Crop Growers Co-operative held at Batavia.

Hartley pointed out that the concentration of buying power in both processing and retail distribution was a major reason why producers must organize if they are to exert any influence on the market. A recent "cost of living" survey shows that in the past 10 years the cost of food at retail has increased 20% and in the same period the prices paid producers has declined 8%.

Marketing groups tend to stabilize prices, Hartley stated, and the New York Canning Crop Growers Co-op, he said, had done more in that respect than any other similar co-operative in the country.

He also announced that the American Farm Bureau Federation has appointed a nationwide committee to formulate plans for future development of bargaining groups on which N.Y.C.C.G.C. secretary W. S. Stemfle has been asked to serve.

Dr. Donald W. Barton has been named head of the Department of Vegetable Crops at Cornell's New York State Experiment Station, replacing Prof. Charles B. Sayre, who retired in July.

Dr. Barton, a geneticist and plant breeder, is currently on Sabbatical leave at Oregon State College, Corvallis, where he is pursuing investigations of pea breeding for disease resistance in the Northwest pea seed growing areas. This project has been of major concern at the Station for several years.

Since Dr. Barton will not return to the Station until March, 1960, Prof. M. T. Vittum, assistant professor, is serving as acting head of the department.

Potato Group Elects

PENNSYLVANIA — Ivan Miller of Corry, Erie County, was re-elected president of Pennsylvania Potato Industries, Inc., at the recent annual meeting of the board of directors at Potato City Hotel near Coudersport. He is the largest grower of potatoes in the Keystone State, having planted 500 acres this year.

The corporation was organized 10 years ago for operation of Potato City Hotel and to handle bag distribution for Pennsylvania Co-operative Potato Growers, Inc.

Other officers of Potato Industries named were Joseph Fisher, Hollsopple, Somerset County, vice-president; George W. Tallman, Tower City, Schuylkill County, treasurer; Leon Epler, Northumberland, secretary; and Owen L. Barkley, Harrisburg, general manager.

Marketing Order in Offing

CALIFORNIA—"We have found growers in northern California to be very serious in their study of a marketing order to control surplus processing tomatoes," reports W. R. "Bill" Lider, Winters, chairman of the statewide steering committee that is working to get the market order.

Under provisions of the proposed order an advisory board of 15 grower members would be formed. Prior to February 1 of each season, the board would review tomato sales figures and determine the total tonnage required to satisfy market demands.

Upon approval of this figure by the state director of agriculture, each grower

having a history of growing processing tomatoes would receive a tonnage allotment for the coming year. For 1960, this allotment would be determined by averaging the three highest of the preceding four years.

A maximum assessment of 15 cents per ton of processing tomatoes is in the order, but studies by California Tomato Growers Association indicate that 6 cents per ton will probably finance the proposed order.

Due to a heart attack, Tom Stinson resigned in late June as manager of California Tomato Growers Association, Stockton, reports John Wetzel, association president.

Wetzel's announcement of Alan Jensen, Stockton, as secretary-manager, followed Stinson's resignation. Jensen has been assistant manager of the association, the nation's largest vegetable bargaining group, for the past four years.

Stiffer "State Seal" Requirements

NEW JERSEY—The "State Seal of Quality" for potatoes will be harder to obtain this year. The State Board of Agriculture has approved regulations providing for a minimum diameter of 2 inches, instead of last season's 1½ inches, maximum size of 4 inches, and stock to be "fairly clean" as defined by USDA.

These new stipulations are in addition to the 1958 State seal standards. New

Know Your . . .

VEGETABLE SEEDS

By VICTOR R. BOSWELL
U.S. Department of Agriculture

CHIVES

THE seeds of chives are similar to those of most kinds of onions, yet there are differences. Both are very small, about 8000 to 10,000 per ounce, with chive seed averaging slightly the smaller. They are usually black, with finely grained or pebbled surfaces, and are irregularly shaped, somewhat like the segments of a rounded body with one convex surface and two other more or less flattened surfaces.

The chive seeds illustrated here are somewhat longer in proportion to their thickness than onion seeds, the ends are more sharply pointed, and the seeds are generally more variable and irregular in shape than onion seeds. Irregular shape is associated with irregular seed set within the capsules. Chive is usually a shy seeder and the seeds shatter badly upon maturity.

The flowers of chive are tiny, attractive, pinkish to light purple, and are borne in globular umbels or heads about an inch in diameter atop seedstalks similar to those of onion. The seedstalks are very slender and usually only about a foot high.

No figures are available on the very small amounts of chive seed produced in this



country. It is produced in the same districts, and is harvested and handled in essentially the same way as onion seed.

Sealing polyethylene bags this way

SLASHES TIME 40%



The photos above were taken in a grocery chain's pre-packaging department. The operator at left uses a Bostitch P6-8F Stapling Plier to seal necks of fruit bags. At the right, another operator closes necks of vegetable bags with a Bostitch E91HVV foot-operated stapler.

Formerly, both sealing jobs were done with hand-tied tape. Then the company tried stapling—and found it 40% faster. Besides increasing efficiency, stapling provides a really secure closure.

Fasten it better and faster with



What do you pre-pack? Whatever the item—fruits, vegetables, fowl—whatever the container material—paper, film, plastic, mesh—we'd like to show you how the right Bostitch stapler and staple can slash your costs. Now, when fractional savings are vital to profit, let us show how large the stapling savings can be.

A Bostitch Economy Man (over 350 of them work out of 123 U. S. and Canadian cities) will gladly demonstrate. He's listed under Bostitch in your phone book. Or send us the coupon.

Bostitch, 428 Briggs Drive, East Greenwich, Rhode Island

- ☐ I'd like to talk with an Economy Man.
☐ Please send information on stapling savings.

I grow or pack _____ (Items) and pack in _____ (Container)

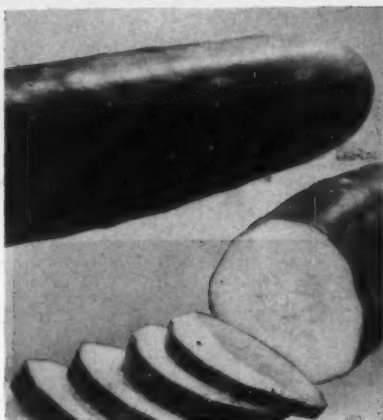
I now use _____ (Fastening Method)

Name _____

Company _____

Address _____

City _____ Zone _____ State _____



Disease-resistant "cukes" mean extra dollars!



"You can afford to gamble on a high-priced harvest of early spring or late fall cucumbers . . . when you plant a highly mosaic and downy mildew resistant seed, like Robinson's Challenger F-1 Hybrid Cucumber," says Ward Robinson. "Our breeding staff recognized this vital need for disease resistance many years ago, and today we offer almost twenty open pollinated and hybrid cucumbers bred to produce maximum yield under diverse growing conditions. Ask your supplier for disease-resistant Robinson cucumber seeds with the bright blue SRS label. And be sure to write to me if you'd like information about our special strains."

LAWRENCE ROBINSON & SONS
SRS Member-Breeder of vine-seeds

SEED

RESEARCH SPECIALISTS, INC.

SALES OFFICES: SRS, Modesto, Calif., U.S.A.

WRITE FOR NAME OF NEAREST SUPPLIER



Jersey Department of Agriculture marketing officials supervising the use of the quality seal said the new regulations would result in a superior pack and would enable State seal potatoes to better meet competition.

Dr. Conrad M. Haenseler, professor and research specialist in plant pathology, retired June 30 after 38 years with Rutgers College of Agriculture and Agricultural Experiment Station. He will continue his research work with bacteria, and, particularly, fungi.

Development of a strain of pepper resistant to a damaging mosaic disease, control of late blight of tomatoes, and research on various other vegetable diseases have been some of Dr. Haenseler's contributions to New Jersey vegetable growers.

Field Day Well Attended

FLORIDA—More than 200 vegetable growers, county agents, agricultural research and extension personnel, and other agricultural specialists from all parts of Florida attended the 20th Annual Vegetable Growers' Field Day at Gulf Coast Experiment Station. The Station research staff reported on the vegetable research carried out during the past year at the Station. Participants in the program included Drs. E. L. Spencer, J. M. Walter, E. G. Kelsheimer, C. M. Geraldson, John Paul Jones, D. G. A. Kelbert, D. S. Burgis, and Mrs. A. J. Overman.—*E. L. Spencer*

A bill authorizing the Florida celery industry to establish a state marketing order was signed into law by Governor LeRoy Collins recently.

A state marketing order cannot become effective until after public hearings and approval through a referendum of celery growers.

New Officers

NORTH DAKOTA—Robert Mitchell, Crystal, was elected president of Red River Valley Potato Growers Association at a board of directors meeting following the organization's annual session in Grand Forks.

Mitchell, vice-president last year, succeeds Paul Engelstad, Thief River Falls, Minn. Ralph Hvidsten, Stephen, Minn., is the new vice-president. Re-elected were

C. P. "Pat" Shannahan, Grand Forks, secretary, and George J. Bushee, East Grand Forks, treasurer.

Engelstad, the out-going president, urged members to heed "tremendous changes" taking place in the industry and to adjust to them.

New Tomato Named

IDAHO—The first curly-top resistant tomato ever developed anywhere has been named "Owyhee". It was introduced this spring by University of Idaho Agricultural Experiment Station.

Melon Thump

TEXAS—On June 25-27, the town of Luling played host to thousands for its sixth annual Watermelon Thump. The event, termed one of the state's outstanding promotions, is designed to call attention to the high quality melons produced in the area and to the importance of watermelon production to the area's economy, according to county agent Steve Lindsay.

In the Cause of Research

OHIO—Every grower selling potatoes to chip companies is keenly aware of the need for more information on the effect of various cultural practices on specific gravity, chip color, and other quality aspects.

The department of horticulture at Ohio Agricultural Experiment Station and The Ohio State University has been carrying on an extensive program trying to find out some of these answers.

To speed up this research Ohio Potato Growers Association has purchased a potato chip fryer for the department costing over \$2000. The specially designed equipment constructed by the Scott-Viner Co., Columbus, consists of a stainless steel conveyor to keep the chips submerged in oil that is heated by a thermostatically-controlled heat exchanger. All parts coming in contact with potatoes are made of stainless steel.

The fryer was presented to the horticulture department by R. E. Weingart, Kent, president of the state-wide organization.—*E. C. Wittmeyer, Ext. Hort., Columbus, Ohio.*



Viewing the new potato chip fryer are, left to right: Gerald Studebaker, vice-president, Ohio Potato Growers Assn., New Carlisle; Dr. Jean Geisman, department of horticulture, OSU; Kacy Jones, Frite Columbus Co., Columbus; Max Gray, Husman Potato Products Co., Cincinnati; Dr. F. S. Howlett, chairman department of horticulture, OSU; V. E. Keiras, manager, Ohio Potato Growers Assn., Columbus; William B. Oliver, president, Potato Chip Institute International, Chamblee, Ga.

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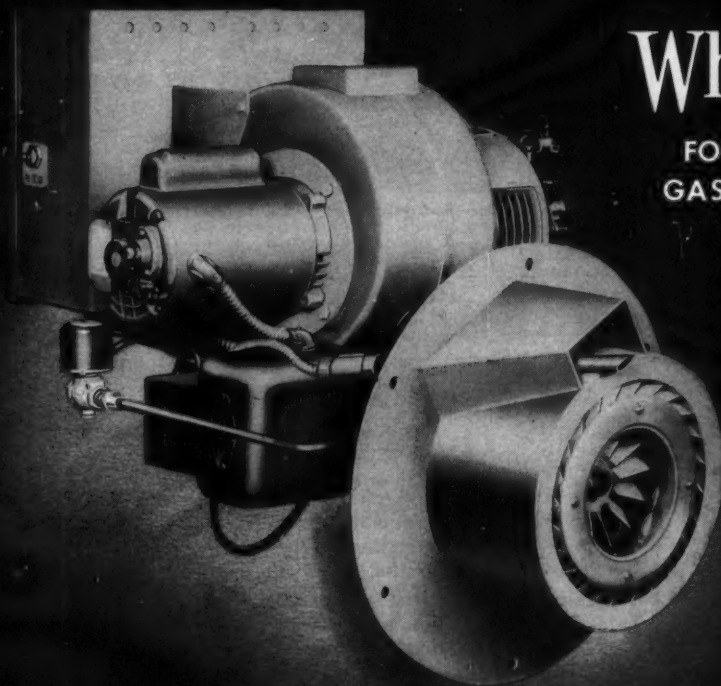
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LE GROWER

Another new development by Iron Fireman



WhirlBlast

FORCED DRAFT
GAS-OIL BURNER

Now...forced draft firing for smaller boilers

The Iron Fireman WhirlBlast gas-oil burner was created to fill the need for forced draft firing in all types of medium size boilers and particularly for the increasingly popular sealed firebox Scotch boiler. Now you can have the advantages of forced draft firing in boilers as small as 18 bhp. The necessity for costly and unsightly smokestacks has been eliminated. All air for combustion is supplied by the burner blower. No extra motors, fans or draft ports are required.

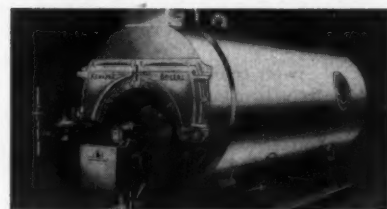
No pulsation

A newly developed firing head has solved the old problem of flame pulsation. This has been accomplished without recourse to firebox vents or other alterations.

Outstanding features of the WhirlBlast burner

1. **Switches fuels instantly.** Fuels can be changed automatically with appropriate controls, or manually by the flick of a switch.
2. **No high smokestack.** A stub stack or vent is all that is required.
3. **For all types of boilers.** Fires sealed firebox boilers under pressure. Also greatly improves draft conditions in natural draft boilers.
4. **Easily installed.** Available with either a flange or pedestal mount. Bolts directly to the boiler front. Inverted model (with draft tube on top) permits mounting on Scotch boilers without interfering with flue doors.

5. **Fuels.** Fires No. 2 fuel oil and all types of fuel gas. Available in either oil, gas or dual fuel models.



Complete package ready to operate —
boiler, burner, controls

Complete boiler-burner units assembled, wired and tested at the factory. Totally enclosed control panel is built into the burner. Wide range of sizes; easily specified by model number.

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AUTOMATIC FIRING EQUIPMENT
FOR HEATING, PROCESSING, POWER



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Please send more information and specifications on the Iron Fireman WhirlBlast burner.

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Firm _____
Address _____
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Sweet Corn researchers are growers, too...



"You can learn and do a lot in the lab when it comes to plant breeding, but there's no substitute for working with corn as it actually grows in the field," says Dr. Stuart Smith, our Research Director and the nation's foremost hybrid sweet corn authority. "My research and breeding people have been growers—and they still are... *specialist* growers, each one a corn expert. When you buy Sweet Corn Research seed, with the bright blue SRS label, you are buying seed developed by specialists for your particular growing needs!"

SWEET CORN RESEARCH, INC.
SRS Member-Breeder of hybrid sweet corn

SEED

**RESEARCH
SPECIALISTS, INC.**

SALES OFFICES: SRS, Modesto, Calif., U.S.A.

WRITE FOR NAME OF NEAREST SUPPLIER



Farmers' Market, Hollywood, Calif., saves produce by attractive display placed on false bottom of paper. Most of the fruits and vegetables can be kept out of heat until sold.

MARKETING

Avoid Summer Slump

THERE'S no midsummer sales slump between Fourth of July and Labor Day when a few fresh ideas on merchandising are put to work! Here, from around the country, is a roundup of selling suggestions for summer months.

Quality must be the watchword more than ever when temperatures are high. Many markets, in fact, owe their success to a reputation for exceptional freshness. Near Rochester, N. Y., the Ver Hulst brothers take special pride in their home-grown sweet corn. They pick it often and remove the field heat immediately by refrigeration.

Some displays must be in the open in order to capture the attention of passing motorists. How, then, can one have an effective display without exposing too much merchandise to damaging summer temperatures? The answer lies in building large, eye-catching displays of the least perishable items and putting less of the highly perishable products on display at any one time.

At the Hollywood, Calif., Farmers' Market, this is accomplished with large clothes baskets as display fixtures. On top of each basket is a neat and appetizing display of one commodity. Not too much is exposed at one time since the display baskets are not filled to the bottom.

At the Peregrine White Farm in Marshfield, Mass., select fruits and vegetables are carefully harvested, with the most perishable ones being displayed on tile over which cold water trickles constantly to assure garden freshness. This farm, like most other successful roadside selling operations, first removes field

heat in a refrigerated cooler and keeps reserve supplies there.

Long Island, N. Y., is the scene of a unique carousel used as a roadside market. Fine mist sprays come down from the top of the carousel to keep the displays cool and moist, another example of a farm roadside market building customer confidence with efforts to preserve freshness.

Well patronized roadside markets usually are those which preserve a genuine farm-fresh appeal and do not appear highly commercialized. Even nickel pricing, rather than the 99-cent technique, is recommended for this reason. Multiple pricing, such as two for 75 cents, does help to increase sales per customer without appearing too commercialized.

It is always desirable to have all prices clearly marked. Customers hesitate to ask prices on unmarked items because they are afraid that a high price would place them in an embarrassing position in not buying.

Another sales-building technique is to include some information about the product on the price sign. It is good to indicate on the sign some of the selling points, quality features, and possible uses.

An example might be a small, neat price sign: "Black Beauty Eggplant 15¢ Excellent Stuffed and Baked." Another example: "Winesap Apples U.S. #1 2½" up 85¢/bkt. An All-Purpose Variety."

Apple and peach sales, in particular, are benefited from signs of this kind because customers want to know whether they are getting the right variety for the use they have in mind.

With a little imagination and a little extra effort on quality maintenance problems, pricing, and displaying, you'll be surprised how fast the midsummer sales slump disappears!—Robert L. Bull, Ext. Marketing Spec., U. of Delaware.

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E GROWER



Equip the new International 340 Utility with three-furrow plow, four- or six-row cultivator. New 3-point hitch available for fast, easy hook-ups with your present rear-mounted equipment.

3-plow pull-power... 3,000-lb lift and carry power

International® 340 Utility tractor

Plowing's easier—harvesting is faster and you'll save time on tillage and cultivating, too, with a new International 340 Utility tractor. With full 3-plow power, the International 340 works its way effortlessly through acre after acre with unmatched operator ease and comfort. Built-in brawn provides the International 340 with strength, traction, and IH dependability. At harvest, you can quickly

attach a front fork lift and Fast-Hitch mounted rear forks for a total carrying capacity of 3,000 pounds. You'll slash truck loading costs appreciably compared with hand-loading methods and save valuable time. For year 'round service, a versatile, husky International 340 Utility is your best 3-plow power buy. Ask your IH Dealer to demonstrate... call him today!

For new catalog on International and Farmall 340 tractors, write International Harvester Company, Dept. AVG-8, Box 7333, Chicago 80, Illinois.

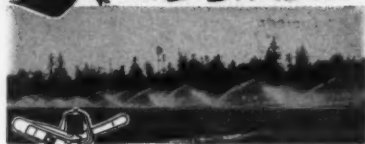
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International Harvester Products pay for themselves in use—Farm Tractors and Equipment... Twine... Industrial Tractors... Motor Trucks... Construction Equipment—General Office, Chicago 1, Illinois



Handy 2,000-lb front fork lift is powered from the tractor's fast-acting hydraulic system. Rear Fast-Hitch forks can lift and carry up to 1,000 pounds.

GIVE DRY WEATHER THE BIRD...



RAIN BIRD, of course!

There are handsome dividends to be earned in providing your own weather for crops and pasture... there's no better way to do this than with Rain Bird Sprinklers. Get water where you want it, when you want it!

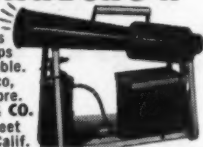
Single installations have more than doubled—even tripled—yields and insured stability of crop income. See your dealer.

Write for free information.

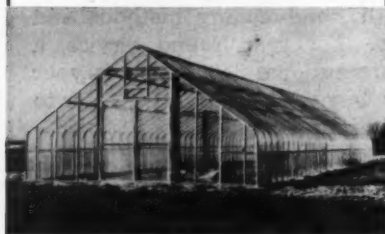


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Positive protection. Uses carbide or acetone. No pilot. Retail \$59.50. Distributorships and dealerships available. Stocks in San Francisco, New Orleans & Baltimore. B. M. LAWRENCE & CO. 244 California Street San Francisco 11, Calif.



PLACO LOW COST PREFAB PLASTIC GREENHOUSES and GREENHOUSE KITS



FEATURING PLACO METAL KNEES

ATTRACTIVE—Metal knees at eave form house into rounding "Gothic" appearance.
STURDY—Metal reinforced treated wood.
FUEL SAVER—Double layer plastic for dead air space plus lowered inside ceiling and sunken ventilators. Save over 1/2 on heating costs.
DOUBLE DOORS front and back—drive a tractor or pickup through for tending, easy cleaning and extra ventilation.
EASY TO ASSEMBLE—or will erect for you. For the do-it-yourself man we have Greenhouse Kits of weatherized plastic and Placo Metal Knees only—you buy your own lumber and hardware and save the prefabricated shipping costs. Any widths—any lengths.

Low Cost Hobby Houses Tool

PLACO

Box 1389
Lexington, Ky.

BEANS

East Welcomes New Lima

THAXTER, a downy mildew-resistant lima bean that is high-yielding and of good quality, is being welcomed on the Eastern Seaboard where downy mildew is a major disease.

This new variety was developed by Robert E. Wester of USDA's Agricultural Research Service at Beltsville, Md., and Robert C. Cetas of Cornell University Agricultural Experiment Station.

Thaxter reaches prime processing condition about 80 days after planting. It is well adapted to mechanical harvesting, is easily shelled, and out-yields Early Thorogreen and Clark's Bush. Processors' tests show Thaxter has a texture acceptable for canning or freezing, and qualities comparable to those of the popular small, green-seeded varieties.

Use a Rotary Hoe

DON'T underestimate the potentialities of the rotary hoe!

With this implement, Rutgers University vegetable specialists point out, the first inch of surface soil can be dried out, thus killing young weeds which have started to grow. It also can be used to break up hard-crusted soil not only for germination of the seed, but also for plants such as snap beans, lima beans, sweet corn, and peas which are already 4 to 6 inches tall.

Rotary hoes are available in sizes from 6 inches in diameter and a 5-inch spread to the large field type with an 8- to 10-foot spread.

Caution should be used in determining the depth to which the tines pierce the ground.

CELERY

Harvester Saves Labor

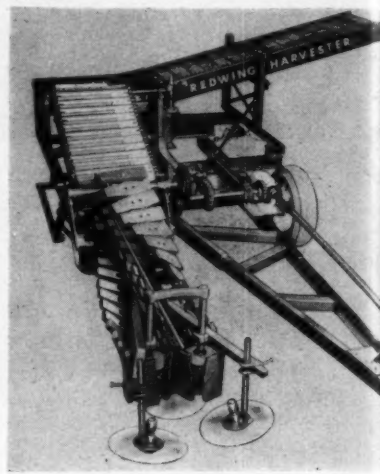
FIELD harvesting equipment, either automatic or semi-automatic, is not new in itself, but new techniques and improvements are on the increase.

One of the developments is the Red Wing celery harvester perfected by the Weid brothers, Frank, John, and Joe, of Red Wing, Minn. The Weids say their harvester and two operators can replace a full cutting crew.

The harvester can be drawn by any two-plow tractor equipped with a hydraulic system and power take-off.

A conveyor section of the machine immediately transfers the cut celery to trucks or trailers, thus decreasing exposure to sun and wind.

The equipment is manufactured by the Mesa Machine Tool Corp., of Albuquerque, N. M., and sold through the Red Wing Celery Harvester Co., 622 Coors Rd., S. W., Albuquerque. Joe Weid, sales manager, says one unit costs \$4480 plus freight and local taxes.



Celery is cut, then conveyed to waiting truck.

Answering Your QUESTIONS

Don't let your questions go unanswered. Whether large or small, send them with a four-cent stamp for early reply to Questions Editor, **AMERICAN VEGETABLE GROWER**, Willoughby, Ohio.

TOMATO PACKAGING MATERIAL

Can you tell me of a packaging material for nesting tomatoes in a fibreboard box that would act like crumpled tissue or shredded paper? In other words, the material should adjust itself to the size and shape of the tomato when the tomato is placed on it. A foam-type substance would fit the bill but foam rubber is too expensive.—Ohio.

Perhaps one of our readers has an idea for this. There must be a product that will do the trick. Let us have your thoughts.

ONION SKINNER

I grow green onions and am looking for a mechanical onion skinner or any device that would be labor saving.—Kansas.

The green onion growers in your state use a rotating brush machine to skin the onions, says Floyd N. Reece, extension agricultural engineer at Kansas State College. Of course, considerable hand labor is still involved. The rotating brush machine is available from most well-known manufacturers of specialty machines for vegetables.

POLY TAPE

I have been looking for something to use to join sections of plastic film together and to make repairs. Is there such a product?—New York.

Yes, a pressure sensitive polyethylene tape is now available. Called Ger-Pak Miracle Tape, it is being offered by Gering Products, Inc., Kenilworth, N.J.

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GROWER



August 3rd



August 6th

You can spray most vegetables with malathion up to 72 hours from harvest without exceeding residue tolerances established by law.

VEGETABLE	tomatoes	broccoli	cabbage	melons	cauliflower & brussel sprouts	beans
INTERVAL days between last spray and harvest	1	3	3	1	7	1



TOMATO GROWERS!

PROFIT BY Earlier - Faster Harvesting WITH SHED-A-LEAF "L"

Acts as a dessicant when sprayed on tomato plants. Quickly dries up the leaves so that tomatoes are exposed to more sunlight. Results in early ripening and picking. Harvesting is easier and faster. Mold is reduced by quicker drying of plants.

Write for Special Bulletin
CHIPMAN CHEMICAL CO.
Dept. V, Bound Brook, N. J.

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WINPOWER Agrotiller
Adds years to your soil. Extra dollars to your Profits!

Rotary tillage
blazes new trail
in farming . . .



Amazing new Agrotiller is a heavy-duty tillage tool that boosts fertility and yields, retards soil erosion, cuts cultivation time, puts vital nitrogen back in soil. Self-sharpening rotor blades. Mounted or trailing models. 50", 60", 70" cutting widths.

Does all these tough jobs well:

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- ★ Weed control
- ★ Turning stubble
- ★ Pasture breaking
- ★ Plows, discs, harrows and mulches in one operation
- ★ Land reclamation
- ★ Turning corn stalks and green roughage

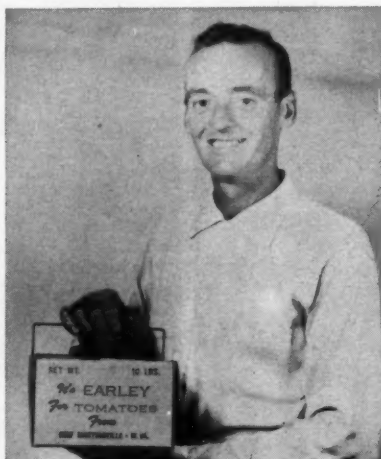
Write today for free folder on this amazing Rotary Tiller, hailed by progressive farmers and farm publications; greatest new product response in our 35-year history!

WINPOWER Agrotiller
Winpower Mfg. Co., Newton, Iowa

TOMATOES

The Package Is the Thing

LAST summer at the end of the tomato growing season, one roadside stand in the Ohio Valley's tomato growing section was selling canning tomatoes at \$1.00 a bushel and more select tomatoes in 5-pound baskets at 78 cents a basket. Daily gross sales were about equal. In Pittsburgh's commission houses at



Vernon Earley and his 10-pound corrugated paper basket made by Ohio Boxboard Co., Rittman.

the same time, 10-pound baskets were bringing from 30 to 90 cents.

These are extreme cases, but they point out that the customer is becoming more and more quality conscious.

The chain stores are large buyers; they demand quality, and customers are being educated to expect better quality. As these big buyers take over increasing amounts of trade, the smaller tomato growers' outlets diminish.

However, the smaller grower can overcome a lessening market in several ways. One is by selecting a good basket, preferably a corrugated paper one, of 5- or 10-pound size, with his name printed on it. This will enable the public to associate the grower's name with the product, and as tomatoes become more plentiful, he will still have a market.

Another way to increase tomato sales is to package only the finest quality tomatoes, and package them attractively. For example, even though it is easy to get 10 pounds of 3- to 3½-inch tomatoes in a basket, some growers will stick a 1- to 1½-inch tomato in the corners. This adds to the weight, but it detracts from the attractiveness and salability of the basket.

Here are some good, basic packaging suggestions:

1) Pack the same size tomatoes with the same degree of ripeness in each basket.

2) Make the top and bottom layer as nearly alike as possible.

3) Do not pack smaller than 2½-inch tomatoes in a basket of No. 1's.

4) Down-grade your tomatoes. Good No. 2's move faster and bring better prices than questionable No. 1's.

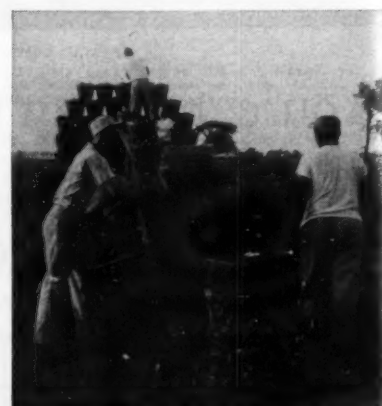
As a further guide, here are the U. S. standard grading specifications: No. 1—Crack-free fruits over 2½ inches in diameter, well-rounded. No. 2—Cracks less than ½ inch, over 2½ inches in diameter, well-rounded. No. 3—Cracks over ½ inch well-healed, and not meeting other specifications of No. 2 tomatoes. Culls—All other fruits not meeting specifications of above three classes. —Vernon A. Earley.

Tandem Loader

IT reminds one of an amusement park roller coaster, this tomato loader which John A. Meier, Perrysburg, Ohio, has built. He attaches it to his truck tandem fashion and claims that with the help of three others he can load 510 hampers of tomatoes in 30 minutes!

Meier's ingenious apparatus consists of an 8-inch conveyor belt mounted on a 25-foot conveyor which is operated by a 3 hp gasoline motor reduced to a 9 to 1 ratio through four pulleys. The belt runs inside a frame over rollers mounted every 18 inches on the conveyor.

The conveyor is attached to the truck by a telescoping tongue which can be dropped back 3 feet at a time as the truck becomes loaded. By means of a clutch the worker on the truck can stop the conveyor at any time he gets behind in loading. The belt is slanted upward on the truck so the worker can lift off the hampers without stooping.



Meier's loader speeds field handling of tomatoes.

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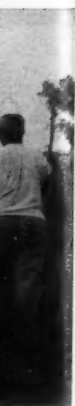
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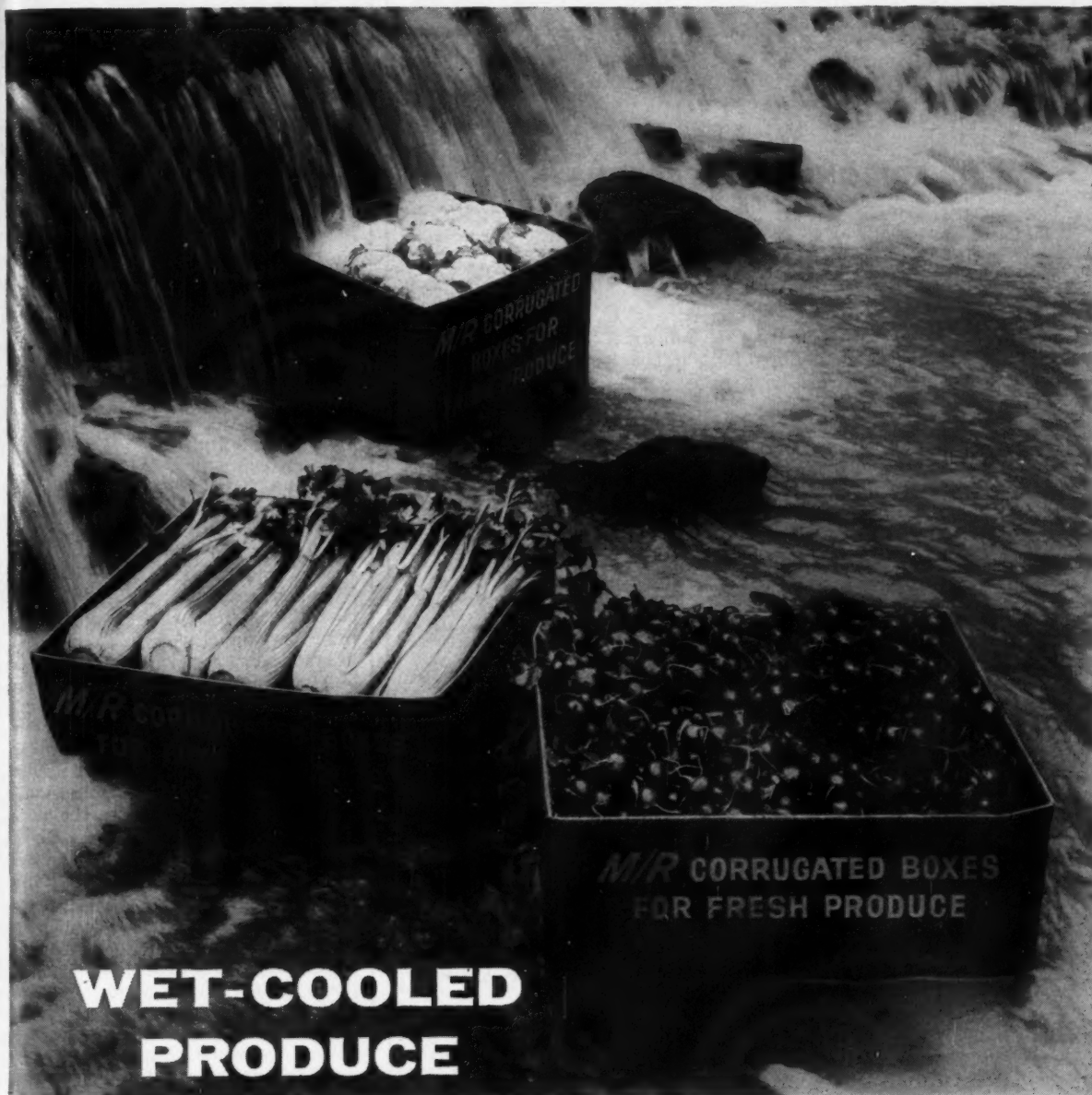
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*...ships safer, stays fresher in **M/R** corrugated boxes*

Hinde & Dauch's new M/R corrugated boxes stay strong and firm after top-icing or hydrocooling—get wet-cooled produce to market in premium condition. In field tests, M/R boxes cut shipping damage to peaches 50%.

You save money with M/R boxes. They cost less to buy, store, handle, pack and ship. They merchandise your brand with colorful printed designs (no labels needed). Write Hinde & Dauch today.



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500 acres of highly developed soil:
A cool climate north of the Adirondacks:
A spinach variety bred for a specific location
and purpose:

These have created August spinach of such quality
that for twenty years it has been quoted by itself
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Other spinach, "good enough" for bulk sale in the
old days, is not firm enough under August produc-
tion farther south to stand up under Cello packaging.
Langdon's Adirondack spinach, this strain grown on
this soil, will stand up.

Market? Half the United States.

Completing the rotation, Pennlawn Fescue for
lawn seed production is wonderful. Residual fertilizer
is used, tremendous supplies of organic matter re-
turned, and a profit in the exchange.

Because of illness the farm is for sale. The time for
sale is when spinach can be seen, which is right now.

Interested? Wire, phone or visit Adirondack
Gardens, Malone, N.Y., and ask for Mr. Langdon.
Phone is Malone 865.

(Afraid of our northern winters? You don't have
to hibernate with the polar bears; turn the key in the
lock and spend the winter where you please. And our
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As It Looks to Me

By JOHN CAREW

Michigan State University

THE attitude of a number of proc-
essors to grower bargaining or-
ganizations is not realistic.

All processors have the undeniable
right to oppose the
demands of any in-
dividual or group
with whom they
deal. But, refusing
to acknowledge the
existence of organ-
ized bargaining
groups and refus-
ing publicly to dis-
cuss the matter of
price bargaining is
impractical.



A few canners and freezers, labeled
arch-conservative by their own col-
leagues, seem to believe that the threat
of price bargaining will disappear if
properly ignored. This would be like
the State Department refusing to talk
with or about Russia with the hope
that it would go away.

Producer bargaining groups will
continue to expand. Growers, just like
processors, know the strength of
working together. The unity of pur-
pose behind grower organizations may
be compared with that behind the Na-
tional Canners Association.

Processors have long stressed the
value of good grower relations. Some
apparently would restrict this to un-
involved individual farmers rather
than groups.

Positive, rather than negative, ac-
tion is needed. Every processor may
have his reasons for being *against*
bargaining. This is his right. But, let
him also state what he is *for*. Put
forth an alternative proposal sup-
ported by convincing arguments. Be
willing to defend the company's stand.
Do not hide behind tradition hoping
the discouraged grower committee
will go home and forget it all.

Fewer growers will mean more
banding together to deal with their
markets. Some growers naturally will
be out-of-line in their demands. But
farmers, generally, are as realistic
in bargaining as the men to whom
they sell.

Processors who recognize and guide
this development will benefit. Those
who bury their heads in the sand may

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well be contributing to increased government controls.

Research advisory committees are needed—"The squeaky wheel gets the oil." Agricultural research is no exception. Farmers who approach experiment stations in a forceful and reasonable way generally get what they go after.

What amazes foreign visitors to the United States is the small number of growers who avail themselves of these services.

"In my country there are no county agents nor farm advisors," said one envious South American farmer, "and the ag colleges refuse to work on practical problems."

Good research workers welcome criticism. They profit by comments, critical or complimentary, on their research. They appreciate being posted on new problems.

One outstanding but little-publicized example of fruitful co-operation in this respect is the Vegetable Research and Marketing Advisory Committee of USDA. Authorized by Congress in 1946, this is one of a number of committees organized to advise federal workers. Fourteen men and one woman representing the growing, processing, marketing, and consuming aspects of the vegetable industry meet annually to review USDA research dealing with vegetables.

Dr. Roy Magruder, executive secretary of the committee and member of the Agricultural Research Service, prepares a research project summary before each session. Under his experienced guidance, a free-swinging and lively analysis usually follows. Committee members seldom hesitate to express their views.

At their 14th annual meeting, held this year in Weslaco, Texas, committee members called for high priority research on plant breeding, insect control, chemical composition, nutritive values, and post-harvest physiology. They complimented the Department on its broad research program, with special commendation for the fundamental work on breeding, pesticide residues, and marketing.

Similar committees are needed in all major vegetable producing states. Some are now in existence, functioning through state grower organizations.

A vegetable research and extension advisory committee can be of value by:

1) Offering members of the vegetable industry an opportunity to guide the development of research and extension programs.

2) Providing research workers with late "in-the-field" points of view.

3) Improving public relations between agricultural universities and state legislatures.

THE END

AUGUST, 1959

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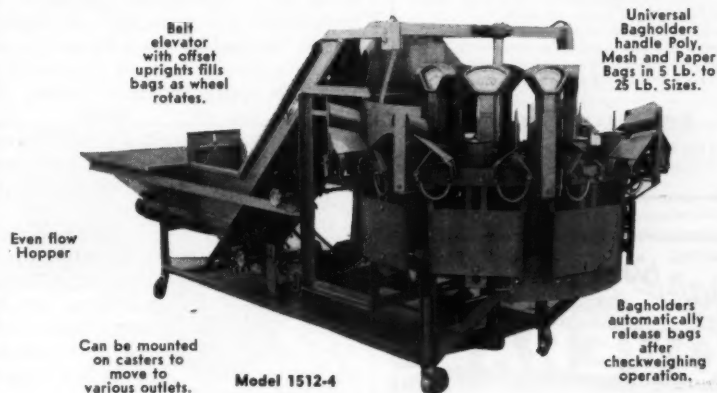
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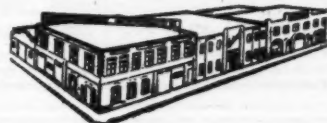
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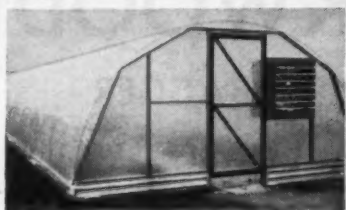
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4 mil., natural, in 100-ft. rolls, 3 ft. wide, \$6.00; 4 ft. wide, \$8.00; 6 ft. wide, \$11.20; 8 ft. wide, \$14.40; 10 ft. wide, \$18.00; 12 ft. wide, \$21.60; 14 ft. wide, \$25.20; 16 ft. wide, \$28.80; 20 ft. wide, \$36.00; 24 ft. wide, \$43.20; 28 ft. wide, \$50.40; 32 ft. wide, \$57.60.
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10 per cent discount on orders over \$24.00.
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GREENHOUSE CROPS

Good Turnout for Field Day

MORE than 160 greenhouse vegetable growers and others interested in greenhouse vegetables registered for Greenhouse Vegetable Day held recently at Ohio Agricultural Experiment Station, Wooster.

Dr. Freeman S. Howlett, chairman, department of horticulture, gave a report on foliar analysis research as related to the fertilization of tomato plants in the greenhouse. He said that the "soluble fraction" tests for nitrogen, phosphorus, potassium, and possibly magnesium might be used by greenhouse tomato growers as an aid in determining when to apply fertilizer during the growing season.

These tests would be supplementary to the total plant analysis tests and those using them would require technical assistance.

Dr. Howlett also pointed out the great differences in early maturity between the Globe A1-5, Ohio WR-3, and Ohio WR-7 varieties in the spring crop. It appeared that Globe A1-5 produced the largest number of fruits, with Ohio WR-3 second and Ohio WR-7 third.

Dr. Robert Partyka, extension plant pathologist, Ohio State University, stressed the possible importance of delaying the application of mulch around tomato plants to reduce humidity and raise soil temperature. This might help to reduce the amount of Botrytis, he said. He also mentioned that the Terachlor and captan mixture as a drench had given better control, without injury to plants, than had the dust.



Dr. R. B. Neiswander, center, demonstrates fog machine for Clint Seitz, Cincinnati, left, and O. A. Sherman, Columbia Station, Ohio, right.

Dr. Walter N. Brown spoke on relative merits of various selections under test, Dr. L. J. Alexander emphasized the importance of controlling tobacco mosaic in greenhouse tomatoes, and Dr. E. K. Alban talked on rapid removal of field heat from tomatoes.

An interesting feature of the meeting was demonstration of a "fog machine" by Dr. R. B. Neiswander. The equipment is used for dispensing insecticides. Dr. Neiswander announced that results of his tests with 10% Phosdrin aerosol looked very promising and that this chemical would soon be available for greenhouse use.

The fog apparatus is manufactured by Aero-Master, Inc., St. Louis 19, Mo., and is distributed by Morrow Products Co., 11302 Superior Ave., Cleveland 6, Ohio.—Wm. M. Brooks, Ext. Hort., Columbus, Ohio.

Introducing the New

Economy Bagger

Average Growers Report Savings Up to \$2,000.00 Per Year on Containers

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1. Eliminates Bruising.
2. Bags 100 Bu. per hour.
3. Bags Bushels or ½ Bu.
4. Handles paper bags, burlap, mesh of polyethylene.
5. All sponge rubber padded, heavy duty canvas covered.
6. Customers prefer bags for loading into cars.

Manufactured and Distributed by

WISCONSIN ORCHARD SUPPLY COMPANY

Dept. BV, Oconomowoc, Wisconsin

IDEAL FOR:

- Roadside Stands
- Point of Sale presentation.
- Bulk Sales
- Fresh Market Sales
- Institutional Selling
- Saves Baskets—use bags
- Bags Apples, Pears, Peaches, Nuts, Potatoes, Peppers, Onions, Cucumbers, Anything that Rolls!

Price \$139.50

Plus Crating Charge \$3.00

Shipping Wt. 90#



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THE CHAINS

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same bags and all graded U.S. No. 1. But the difference between the three packs was tremendous. I'll buy more when they adopt a central packing system."

About Advertising by Growers:

Most chain store buyers question the value of grower advertising campaigns aimed at selling a particular fresh produce label to the general public.

"The supermarket shopper has little or no brand loyalty for fresh produce."

"You can influence her to eat more tomatoes, more cherries, or more apples, but getting her to buy more 'X' brand of fresh tomatoes is a different matter. To do it you would need the type of year-round uniform quality possessed by canned and frozen foods."

Advertising by growers aimed at influencing chain store buyers, on the other hand, is generally considered worthwhile. "Quite often an ad in *The Packer* will catch my eye when I need a particular item."

"Brand labeling has little effect on shoppers but it helps build a reputation for the item among store managers and buyers. My managers frequently ask for a particular brand of sweet corn or celery they know from experience has high quality."

About Prices Paid for Produce:

Buyers are generally touchy about the subject of prices. They have been under fire frequently for their mark-up policies.

"The grower's concern should be what we pay for the produce, not what we sell it for. That's our business. Can you imagine how a farmer would react if his seedsman complained because he was asking too high a price for his crops?"

And about promotions and sales: "With centralized control of prices on an area-wide basis, early planning is necessary. Most promotions or features are planned four to six weeks in advance; few in less than a week."

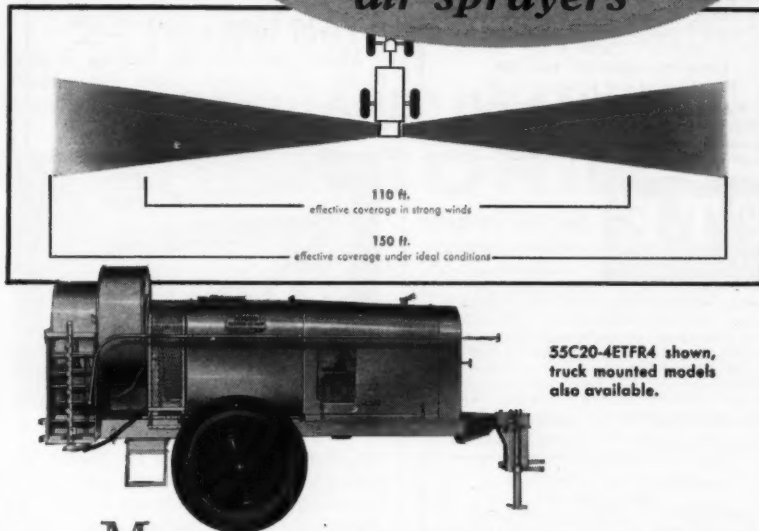
"To put on a successful promotion we must offer a recognized good bargain to the consumer. Consequently we need to buy a large volume at a relatively low price established weeks in advance of harvest. The price may seem low to the grower but we must meet our competition."

Asked what they considered was a fair price to the grower for several crops, buyers generally indicated ignorance regarding costs of production and marketing. As one buyer admitted, "Frankly, we pay as much

(Continued on page 29)

**Save Time
Save Money**

**with Myers exclusive
two-way row crop
air sprayers**

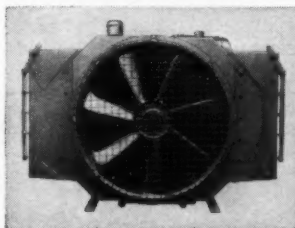


55C20-4ETFR4 shown,
truck mounted models
also available.

MYERS two-way air handling technique gives thorough foliage coverage over a spray swath of 110 feet, even under strong wind conditions. With ideal wind conditions you can increase effective coverage up to 150 feet. This accurately-rated performance assures you of a cleaner crop, larger yield, bigger profits.

Myers two-way sprayers reduce down the row travel, save time and minimize soil compaction.

Balanced two wheel design makes possible short row-end turning, easy towing, and convenient handling. Sprayer has 29" axle clearance, with standard 64" to 84" tread adjustment to prevent plant injury. Optional 36" clearance available. Engine, discharge, and remote air pattern controls are located within easy reach of operator.



58CA-24 Attachment

A Myers field crop air attachment can be fitted to your present high pressure sprayer, saving you spraying time, material, costs.

See for yourself

Ask your Myers dealer to show you the full coverage protection you get with a Myers "two-way" air sprayer.

Myers

The F. E. Myers & Bro. Co.

ASHLAND, OHIO

KITCHENER, ONTARIO

a complete line of sprayers and irrigation equipment



SAVE TIME SAVE LABOR Do a BETTER and FASTER job of SPRAYING and DUSTING

with our KWH shoulder mounted MIST-BLOWER and DUSTER, powered by gasoline engine (1 and 3 HP Models).

TRACTOR MODELS: 4-36 HP.

For literature and prices write to:

VANDERMOLEN EXPORT CO.
316 Bloomfield Ave. NUTLEY 10, N.J.



SAFER! SURER!
Feeds plants
all season

Provides essential iron, boron, manganese, zinc, copper and molybdenum in new slow-soluble form. Won't leach away. Nontoxic when used as directed. More than 2 million pounds used last year in premium fertilizers. Try it and prove the difference for yourself! Send \$2.50 for 5-pound bag (or \$3.95 for 10 pounds), parcel post prepaid.

FERRO CORPORATION, 4191 East 56 St., Cleveland 5, Ohio

When writing advertisers
please mention
AMERICAN VEGETABLE GROWER

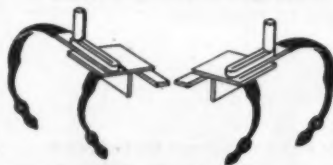
MADE FOR YOU!

The finest...

VEGETABLE CULTIVATOR

...in the field

TRY IT AT OUR EXPENSE



BETTER WORK—no other tool can equal it, cultivator fits every tractor. Built to outlast the life of your tractor. Roughest and toughest in the field—nothing to break. Speed up your tractor and do more acres per day. Does all your cultivating from beginning to end. Have a cleaner field—no weeds with a KIRBRO cultivator. Have top rate performances with the KIRBRO cultivator.

WRITE OR CALL FOR FURTHER DETAILS

KIRBRO CO.

131 SCHLEY ST. NEWARK, N.J. WAVERLY 3-4635

New for You

A New Idea

Many growers are finding it pays to use corrugated boxes for squash, cabbage, and peppers. The new boxes



are sturdy and have a lot of eye appeal. Why don't you get help from Container Corporation of America's Packaging Department? This group will attack any packaging problem and come up with the answer. Write Container Corp. of America, 38 S. Dearborn St., Chicago 3, Ill.

New Film

Out on the West Coast packers and growers are packaging vegetables with greater speed by using a new polyethylene film. The new film is made from Tenite, and in more than one million bags not one stop was experienced because of film breakage. Actual reports show improved packaging speeds of 15 to 20%. In addition, the new plastic has a stiffness



and clarity not found in other films. You should know about this new development; write to Eastman Chemical Products, Inc., 260 Madison Ave., New York 16, N. Y.

'Profit Plant' Kit

Proper plant nutrition is invaluable, as you know. To discover what your tomatoes, potatoes, or corn need to



increase yields and growth is difficult. Now these nutritional deficiencies can be uncovered easily and inexpensively. Know whether your vegetables lack boron or other elements by using the new kit pictured above. The kits cost only \$7.95 and, according to growers, pay for themselves in a few weeks. Write Jim Hampton, Plant Science Products Co., 1409 Powell St., Emeryville, Calif., for details.

Signs for You

Because so many of our readers have asked me to tell them where they can get roadside stand signs, we decided to have some made and sell them



to our readers at cost. The signs are quite attractive, printed on heavy, water-proof board 22 x 28 inches, in two colors. In addition, we have had 5 x 28-inch strips made which can be hung below the signs to alert the passerby to what vegetables you have for sale—corn, tomatoes, etc. If you would like some of these signs, just write Ed Meister, AMERICAN VEGETABLE GROWER, Willoughby, Ohio. The large signs cost \$3.00 apiece, or two for \$5.00. The strips are 50 cents each or 10 for \$3.50.

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as we have to and no more in order to get the quality we want."

About Local vs. Shipped-In Produce:

"We would always prefer to buy locally grown crops. But until we can get the volume we want in the proper containers, we can't afford to buy more. Most local growers cannot or will not meet our specifications."

In reply to the observation that stores often stock higher-priced out-of-state items when local produce is a glut on the market, one buyer said: "We cannot continually switch from area to area as prices rise and fall. Furthermore, we cannot afford to buy up a hodge-podge of local loads even though the price might be lower."

"Don't forget that some consumers prefer the shipped-in items. Even if local potatoes and apples were given to us free of charge, I would still sell some Western apples and Idaho potatoes. Many of our customers are willing to pay a high premium for these distinctive products."

About Containers and Packaging:

"We've been criticized for not having a consistent permanent policy on packaging. We never shall! Our demands to the growers will continually change with consumer preference and packaging technology."

"Let me give you an example. We find that the customer preference for apples is around 69 cents a bag. When apples are high priced we want 3-pound bags. When the price drops we demand 4- and 5-pounders."

"Growers who refuse to take advantage of new developments in hydrocooling, vacuum cooling, waxing, and controlled atmosphere storage will find it difficult to sell to us."

These interviews clearly reflect the competitive nature of produce buying and the growing influence of individual buyers. Their bargaining strength with farmers can be expected to increase rather than diminish.

Vegetable growers have several alternatives:

1) Fight the chains by refusing to cater to their demands.

2) Seek other markets such as roadside stands, speciality sales, pick-your-own, etc.

3) Adapt production and marketing methods to modern supermarket practices and strengthen their ability to bargain on a near equal basis with the chains.

THE END.

1959 POTATO YEARBOOK

The 1959 *American Potato Yearbook* may be obtained for \$2.00 a copy from American Potato Yearbook, P. O. Box 540, Westfield, N. J. A complete set in one volume, 1950 to 1959, is available for \$12.00.

AUGUST, 1959

24 HRS.

NOW! Control insects up to 24 hours before harvest with

ORCHARD® BRAND PHOSDRIN

When your crop is just about ready for market, don't risk late season insect damage! Save it with Orchard Brand Phosdrin!

You can apply Orchard Brand Phosdrin *right up to 1 day before harvest* on such vegetables as corn, beans, broccoli, cabbage, peas, tomatoes, and such fruits as apples, peaches, pears, plums, and strawberries; 2 and 3 days before harvest on many others. You get excellent control . . . vital, last-minute protection against insect damage that could cut heavily into your profits.

Phosdrin has been thoroughly tested and enthusiastically

accepted by agricultural authorities and commercial growers. It's powerful . . . kills many insect pests almost immediately . . . leaves no objectionable taste, odor or harmful residue when used as directed.

Remember — you can use Orchard Brand Phosdrin all through the growing season right up to a day or so before harvest. So be sure. See your Orchard Brand dealer now for Phosdrin and for all your agricultural chemical needs.



Orchard Brand—
The right product
for
every pest
problem



GENERAL CHEMICAL DIVISION

40 Rector Street, New York 6, N.Y.

POLYETHYLENE FILM

Transparent



SPECIAL FOR MARKET GROWERS
BLACK MULCHING GRADE

.0015"—3 ft. x 250 ft., \$4.00 a roll, net
.0015"—3 ft. x 500 ft., \$7.50 a roll, net
.0015"—3 ft. x 1,000 ft., \$15.00 a roll, net
.0015"—4 ft. x 1,000 ft., \$20.00 a roll, net

"We ship same day"

YOH & HOOKER
BOX 1165 • YOUNGSTOWN, OHIO

Sizes and Prices

Our Polyethylene film is .004 mil. thick and this is medium weight, and cost considered, is the most satisfactory.

3 ft. wide by 100 ft. long \$6.00 a roll
4 ft. wide by 100 ft. long \$8.00 a roll
6 ft. wide by 100 ft. long \$12.00 a roll
8 ft. wide by 100 ft. long \$16.00 a roll
10½ ft. wide by 100 ft. long \$21.00 a roll
20 ft. wide by 100 ft. long \$40.00 a roll
6 Rolls to 9 Rolls Deduct 20%
10 Rolls or More Deduct 25%

Big Sample Bargain

Big useable sample piece 10 ft. long by 3 ft. wide. Send \$1.00 cash, check or stamps for this big sample by mail, postpaid

OPPORTUNITY ADS

Only 25c a word for one-time insertion. 20c a word for two-time insertion. 15c a word for four-time insertion—CASH WITH ORDER. Count each initial and whole number as one word. Copy must be in 15th of second month preceding date of issue. ADDRESS AMERICAN VEGETABLE GROWER, Willoughby, Ohio.

AGENTS WANTED

RUN A SPARE-TIME GREETING CARD and gift shop at home. Show friends samples of our new 1959 Christmas and All Occasion Greeting cards and gifts. Take their orders and earn to 100% profit. No experience necessary. Costs nothing to try. Write today for samples on approval. REGAL GREETINGS, Dept. 14, Ferndale, Michigan.

BOOKS

BERRY BOOK: "THIRTY YEARS OF BERRIES." Raspberries and strawberries. 84 pages, price \$1.00 P'd. ROY TURNER, 1525 S. Livingston St., Peoria, Ill.

THE HOW-TO BOOK ON STRAWBERRIES. The layman's primer, the professional's reference and everyone's factual guide to more and better strawberries. \$1.50. AMERICAN VEGETABLE GROWER, Box 107, Willoughby, Ohio.

DRUG MEDICINES DISAPPOINT, DISILLUSION. Why defeat nature's spontaneous recovery efforts? New 25¢ book, MEDICINES OF NATURE describes seven universal curatives freely available everywhere. M-PRESS, Coalton 143, Tennessee.

POTATO GROWERS—STILL AVAILABLE a few copies of our 1957 edition at special price of \$1.00. First come, first served. AMERICAN POTATO YEARBOOK, Box 540-A, Westfield, New Jersey.

TOMATO GROWERS—JUST PUBLISHED 1959 American Tomato Yearbook. Crammed with important facts. Send \$2.00. Complete volume 1951-1959, \$12.00. AMERICAN TOMATO YEARBOOK, Box 540-A, Westfield, New Jersey.

BRUSH & WEED KILLERS

KILL SUBMERSED WATER WEEDS which foul up motor propellers, tangle fishing gear and choke irrigation ditches with R-H Granular Weed Rhap. Inexpensive, easy to use, sure results. For details write REASOR-HILL CORPORATION, Box 36AV, Jacksonville, Arkansas.

KILL BRUSH AT LOW COST WITH AMAZING R-H Brush Rhap. Will not injure grasses, grains, cattle or other animals. See your dealer or write REASOR-HILL CORPORATION, Box 36AV, Jacksonville, Arkansas.

KILL BITTERWEEDS, WILD ONIONS AND dog fennel with R-H Weed Rhap at low cost. Will not injure grasses, grains, cattle or other animals. Call your dealer or write REASOR-HILL CORPORATION, Box 36AV, Jacksonville, Arkansas.

BUSINESS OPPORTUNITIES

EARN MONEY AT HOME RAISING FISH- worms for us! We buy your crop! Inquire: OAK-HAVEN-25, Cedar Hill, Texas.

EARN CASH FROM STRAWBERRY SALES! Get our How-To Book on Strawberries that gives common sense treatment of the must and must-not in strawberry culture. Fully illustrated. \$1.50. AMERICAN VEGETABLE GROWER, Box 107, Willoughby, Ohio.

DOGS FOR SALE

DOGS FOR SALE. REGISTERED GREAT DANE pups. Champion stock. BERNARD HANTOWER, Rt. 1, Rushtown, Ohio. Phone Portsmouth exchange Blackburn 9-5049.

DWARF APPLE TREES

WELL BRANCHED YELLOW DELICIOUS and Double Red Delicious on genuine East Malling No. IX. Rootstocks strong 2-year trees. Reasonable Prices. SEVEN DWARF NURSERY, Box 201, Medford, Ore.

DWARF APPLE UNDERSTOCKS

BUY OUR QUALITY UNDERSTOCKS. Graft them yourself and save over one half. Special discounts for quantity lots. SEVEN DWARFS NURSERY, Box 201, Medford, Ore.

FOR SALE—EQUIPMENT & SUPPLIES

SENSATIONAL GARDEN TRACTOR. HOES between plants and rows, including strawberries. Eliminates hand hoeing. Standard in size, yet entirely different. Patent 2742840. Also tills. Fantastic offer to first few inquiries. AUTO HOE, DePere 8, Wisconsin.

WOOD LETTERS FOR ATTRACTIVE SIGNS. They last for years. Increase business and save money. NORTHLAND PRODUCTS, Route 22282, Rockland 25, Maine.

4 HP GARDEN ROTARY TILLER, SPRAYER, tractor. Combined all \$119.00 Special \$227.00 value. UNIVERSAL MFG., 324 West Tenth, Indianapolis 2, Indiana.

NEW AND USED WASHERS, WAXERS, sizers, grower and commercial sizes. Successful new design metal roller MULTISIZER for sweet potatoes, cukes, vegetables and fruits. C. STANLEY SHORT, Cheswold, Delaware.

28 SPEED SPRAYER, 36 SPEED SPRAYER Bean 35 PTO sprayer, Bean 35-T, Bean 14-MT, 500 gal Myers PTO, Bean Royal 50 and 35 pumps. New-used. Bomber tires & tubes. Bargains. 70,000 new crates. Small grader. CORY ORCHARDS, Cory, Ind.

IRRIGATION EQUIPMENT 4" and 5" valve couplers and elbows. JOHN SURGEON, Grafton, Illinois. Phone Sterling 63780.

NEW AND USED ICE CRUSHER SLINGERS bought and sold. Tell us your needs. Your complete source on ice equipment and supplies. Write for free catalog. INDEX COUPON AND SUPPLY COMPANY, 612 Indiana Avenue, La Porte, Ind.

HARDIE POWER TAKE-OFF ROW CROP sprayer with 500 gallon tank, 60 GPM pump, large wheels and tires, 42 ft., one side hydraulic controlled boom. Excellent condition. DEISCH SUPPLY COMPANY, Nappanee, Indiana, Phone 654.

WATER SUPPLIES, INC., P. O. BOX 547, Ashland, Ohio—Phone 21565. We are headquaters for New Myers Power Sprayers, and Used Sprayers. Please let us know your needs.

INVENTIONS WANTED

ARE YOU INTERESTED IN OFFERS FROM reliable manufacturers for your invention? Patented, unpatented, HARVEY ASSOCIATES, Dept. 8A, Cambridge, Maryland.

MISCELLANEOUS

FOURMONE COMPOST ACTIVATOR TURNS garden wastes, manures, sawdust, etc., into compost. Easy and safe to use. 3 oz. trial can \$1.00 (treats approximately 6 tons garden wastes) ½ lb. \$2.25, 1 lb. \$3.95 postpaid. Lower prices for quantities. Free literature from FOREIGN PRODUCTS CORP., 21 Washington St., West Orange, N.J.

BANANA PLANT, GROWS ANYWHERE— Indoors, outdoors. \$1.50. Postpaid. SOPHIA SULEN, Ladylake, Fla.

FOR HIRE: MEXICAN VEGETABLE, FRUIT farm or ranch workers, with American experience; \$100 monthly, board, year around. "CORONA", 516-17 Morelos, Guadalajara 7, Mexico.

SAVE LABOR COSTS—GET BETTER RE- sults with Letherman's Chemical Weed Killers for Ponds—For Non-Crop Land Areas—For Use in Farm Crops—Vegetables—Orchards. Write your problem to LETHERMAN'S, Box VG, Canton 2, Ohio.

DRESSES 24¢; SHOES 39¢; MEN'S SUITS \$4.95; Trousers \$1.20. Better used clothing. Free catalog. TRANSWORLD 164-CA Christopher, Brooklyn 12, N.Y.

TUBE STEEL DORMITORY BEDS WITH springs. (Used) \$50 Dozen. Substantial savings for larger quantities. GERALD MATTICE, Avoca, New York. Phone 2312.

OF INTEREST TO WOMEN

LEARN PROFESSIONAL CAKE DECORAT- ing. Details free. DECO-SECRETS, Venice 33, Calif.

SEW APRONS AT HOME FOR STORES. No charge for material to fill orders. In our fifth successful year. Write: ADCO MFG. CO., Bastrop 8, Louisiana.

RABBITS

EXTRA DOLLARS RAISING ANGORA AND New Zealand white rabbits. Ready market for your production. Free details. Martin's Rabbits, Morganfield, Kentucky.

ROTARY TILLERS—SALES, SERVICE

SWISS SIMAR TILLER—SALES, SERVICE, parts. GORMSEN'S, Strongsville, Ohio. Center 8-6495.

SADDLES

SADDLES, WESTERN & ENGLISH. SEND 10¢ for 48-page catalogue showing 76 different saddles plus all types of equipment and riding wear. Saddle dealers wanted. H. R. MILLER SADDLE CO., 5904 Prospect, Kansas City, Mo.

GIANT WATERMELONS

(Continued from page 13)

amount you can lose on fertilizer used with poor seed. For a uniform stand, plant 15 seeds to the hill. At this rate, a pound of seed plants one acre.

2) Plan your rotation so you will not plant on the same site more than once in five years. Watermelons grow best on slightly acid, deep sandy soil that is well drained, but will grow on any type soil except muck.

3) Fertilize according to soil test. The dollar spent for a soil test is the best fertilizer investment you can make. By following the recommendations of your soil chemist, you practically eliminate gourd necks, hard hearts, and flat tasting melons. On deep East Texas sandy soil, I split my fertilizer into an initial application and two side dressings, one when the vines begin to run, and one at bloom stage.

4) Grow a cover crop on the site if possible. Watermelons are gross feeders and respond to organic matter as well as fertilizer. If manure is used, spread evenly and turn under in early fall.

5) Space watermelons at least 12 x 12 feet, and thin to one plant per hill. When the first true leaves form, thin to two of the best plants. About two weeks later, thin to one plant. Use a sharp hoe to clip the plants off even with the ground.

6) Cultivate shallow, and never turn a vine to plow. Use any type farm implement to control grass and weeds, but stay ahead of the vines.

7) Control fungus and insects by either dusting or spraying. A number of good combination insecticide-fungicides are on the market, but be sure you do not use a dust containing either sulfur, DDT, toxaphene, BHC, or chlordane. Bees pollinate watermelons, but will not be harmed by insecticides, if you dust or spray in late afternoon.

8) Never work in the vines when they are wet. This may spread fungi.

9) Leave only four of the best formed watermelons to the vine, keeping all others pruned off. A 12 x 12 spacing gives 300 hills to the acre. By leaving four to the vine, you can grow 1200 good watermelons to the acre. Do not prune the vines.

10) Common hydrated lime sprinkled over the top side of green rind varieties will reflect the sun's rays and prevent sunburn. All gray rind varieties are resistant to sunburn.

11) Ask your county agent about special problems.

12) Close out the season by planning next year's crop. You are building a trade. THE END.

AMERICAN VEGETABLE GROWER

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PREPACKAGING

(Continued from page 12)

if they are properly refrigerated. Further research is needed to develop an attractive package and to determine whether these items should be sold entirely by whole heads or whether the heads could be cut in halves to provide consumers with the best-size units.

Potatoes: Consumers are demanding more washed potatoes and more visibility in potato packages. Paper bags have a great advantage over poly bags because they reduce light exposure and greening.

Potatoes prepackaged in poly bags should be packed and distributed in

WHAT DO RETAILERS WANT IN PACKAGING?
There is a pressing need for better packages for potatoes and other vegetables in retail stores, as Donald Stokes outlines in the accompanying article.

We're confident our readers have good ideas for consumer-sized packages—and ideas are needed. Why not send us your thoughts after you have read the packaging article? We will welcome them.

Bear in mind that retailers expect three things of a package:

- 1) Consumer-size; one or two packages to a customer.
 - 2) Better visibility of the contents.
 - 3) Reduction in spoilage of contents.
- In addition, retailers say that they want more prepackaging, but they don't want to do it themselves. They want it done for them. Thus prepackaging falls to the lot of the grower-shipper and the grower-packer. So the package should be one that growers can readily handle.

paper master containers until they are ready to display on the retailer's shelves. The retailer's stocks should be rotated carefully to minimize greening.

Early varieties of potatoes present a problem in that they are generally more perishable than late varieties. Growers and shippers are fearful of their ability to maintain quality of early potatoes properly if packaged in poly bags.

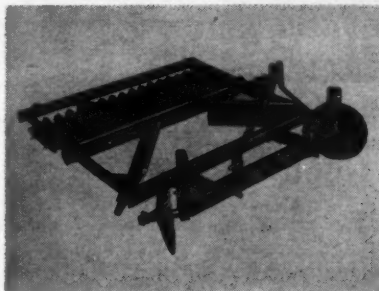
However, there is increasing demand from retailers for prepackaged potatoes, and more effort should be made to find a better way of prepackaging early potatoes as well as the late varieties. **THE END.**

PLASTIC BAG WARNING

BECAUSE of the tragic deaths from accidental suffocation caused by plastic garment bags, the national headquarters office of the Produce Packaging Association has taken positive action to preclude the chance that their packaging materials may do likewise.

Plastic bags for fresh fruits and vegetables already have perforations in them; also, most produce bags are too small for an infant to pull over his head. However, packagers are urged to locate the perforations over the entire surface of plastic produce bags to minimize any hazard of accidental suffocation.

3 POINT VEGETABLE TOOLS



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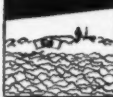
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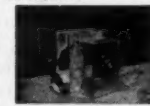
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What Makes a Good Package?

A PACKAGE pleases the grower if it is easy to pack and is inexpensive; it pleases the middleman if it can take rough handling and give good protection to its contents; it pleases the retailer if it is easy to display. In short, the best package must combine a number of virtues.

However, it seems that quite often a package is used by a grower simply because everyone else is using it. It may not be the best package, or even close to the best. It may actually be harming the growers who are using it by not satisfying the needs of the market.

A recent survey has shown that the average food and grocery manufacturer introduces a new package every 14 months for the purpose of increasing sales. A little of this thinking would be of help where growers are "stuck" with a package that doesn't do anything for them.

It takes nerve to try out a new package. Nine times out of 10 your neighbors and friends will endeavor to discourage you from going ahead. But the only way to be sure after studying the problem thoroughly is to try, and it is this philosophy which has brought some excellent packages into existence.

If your sixth sense tells you that the package you are now using for your vegetables could be improved upon, why not try out your ideas? You can be sure of our encouragement. If you have a new package deserving of publicity so that its use will become more widespread, send us a picture of it and a few words about its advantages. We'll be glad to publish the information, so just send it along to us.

One thing is sure: improving the package will improve sales. And that is what we are all after.

Vince Kosuga Does It Again

WE like the pioneering spirit exemplified in a press release with the title, "Vince Kosuga Does It Again." At Pine Island, in Orange County, N. Y., Vince Kosuga has expanded from a small truck farm in the '40's to one of the largest, best-equipped vegetable producing enterprises in the East.

Occasion for the announcement is the establishment of a vacuum cooling unit capable of cooling at one time an entire truck trailer containing 550 crates of lettuce. Within 20 minutes field heat is taken from the heart of the lettuce and the temperature reduced to 36°.

Now Orange County can become an important supplier of lettuce for the New York market. Lettuce vacuum cooled will come from growers in the surrounding areas as well as from the Kosuga farm. On a 24-hour basis 25 or 30 trailer loads a day can be cooled. The vacuum plant was designed by Jet-Vac Coolers, Inc., Juniper and Market Sts., Philadelphia 7, Pa., and erected by Ace Manufacturing and Welding Co., Inc., Thorofare, N. J.

Since ice in the container is no longer necessary, vacuum cooling makes possible the use of less expen-

sive fibreboard containers as opposed to wooden crates. Kosuga uses the new Hydro-Seal box made by Container Corporation of America.

An important part of the Kosuga farming operation is a large, mechanical cold storage which, in conjunction with vacuum cooling, means that no effort is spared to retain the fresh quality of vegetables from farm to market.

To Mr. Kosuga we say, "Well

VEGETABLE CONVENTION



"How about the best years of my life?"

done." Resourcefulness, ability, and willingness to take a chance means progress not only for Vince Kosuga, but for others in his vicinity as well.

Alpha Neutroleum

DOWNY mildew, anthracnose, scab, blight, brown rot, and other bacterial diseases have long been the bane of the vegetable growers' existence. Scientists are continuously ferreting out

QUOTE-OF-THE-MONTH

The true Southern watermelon is a boon apart, and not to be mentioned with common things. It is chief of this world's luxuries, King by the grace of God over all the fruits of the earth. When one has tasted it, he knows what the angels eat. It was not a Southern watermelon that Eve took; we know it because she repented.

—Mark Twain

new ways to combat these plant diseases. It takes something strong to knock out these well-established bacteria and fungi, and one of the latest effective test materials is garlic.

According to researchers at the University of California, all the test bacteria and fungi were susceptible in varying degrees to the action of pure undiluted garlic juice and to aqueous extracts of commercial garlic powder.

Over and above their antibacterial and antifungal properties, garlic preparations have lots of other recommendations in their favor: they are cheap and easy to obtain; they present no residue problem; in the powder form they maintain full potency for at least three years under ordinary room-temperature storage.

And then, there is almost a promise that the objectionable smell will be removed by the addition of a chemical called alpha neutroleum.

But, if the odor were removed, would garlic be the same old garlic? Would the effect on the bacteria and fungi be lessened? Probably not. But a salad without the old garlic fragrance—that is unthinkable!

Coming Next Month

- Dwarf Tomatoes and Mechanical Harvesting
- What You May Expect in New Varieties
- Keeping Up with Upkeep and Repairs in Greenhouses
- Delaware Co-op's Successful Potato Marketing Program
- Row Crop Sprayer Does Double Duty

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Endrin is long-lasting. Many days after application you can count on effective control. And it works fast—destroys foliage insects within hours after application.

Endrin is available as a dust or emulsible concentrate. Choose the formulation that best suits your needs. No matter how you use it, endrin gives you dependable protection.

Stay on top of foliage insect control this season. Use endrin. Endrin is available under well-known brand names from your insecticide dealer. Order your supply today.

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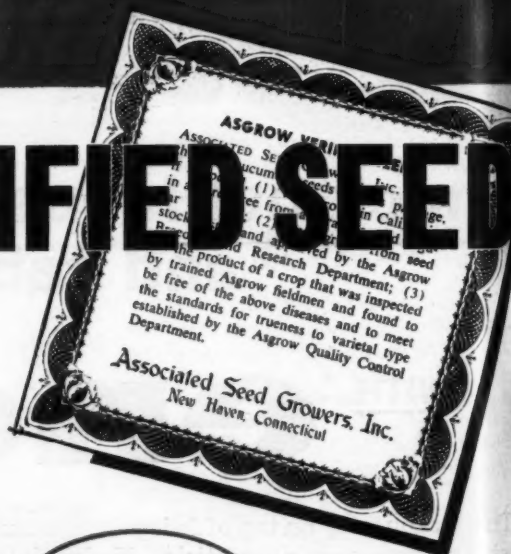
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